

# California Adolescent Health

2009

**OWH** OFFICE OF  
**WOMEN'S  
HEALTH**

CALIFORNIA DEPARTMENT OF PUBLIC HEALTH  
CALIFORNIA DEPARTMENT OF HEALTH CARE SERVICES





# California Adolescent Health

2009

Prepared by

**CALIFORNIA DEPARTMENT OF HEALTH CARE SERVICES  
CALIFORNIA DEPARTMENT OF PUBLIC HEALTH**

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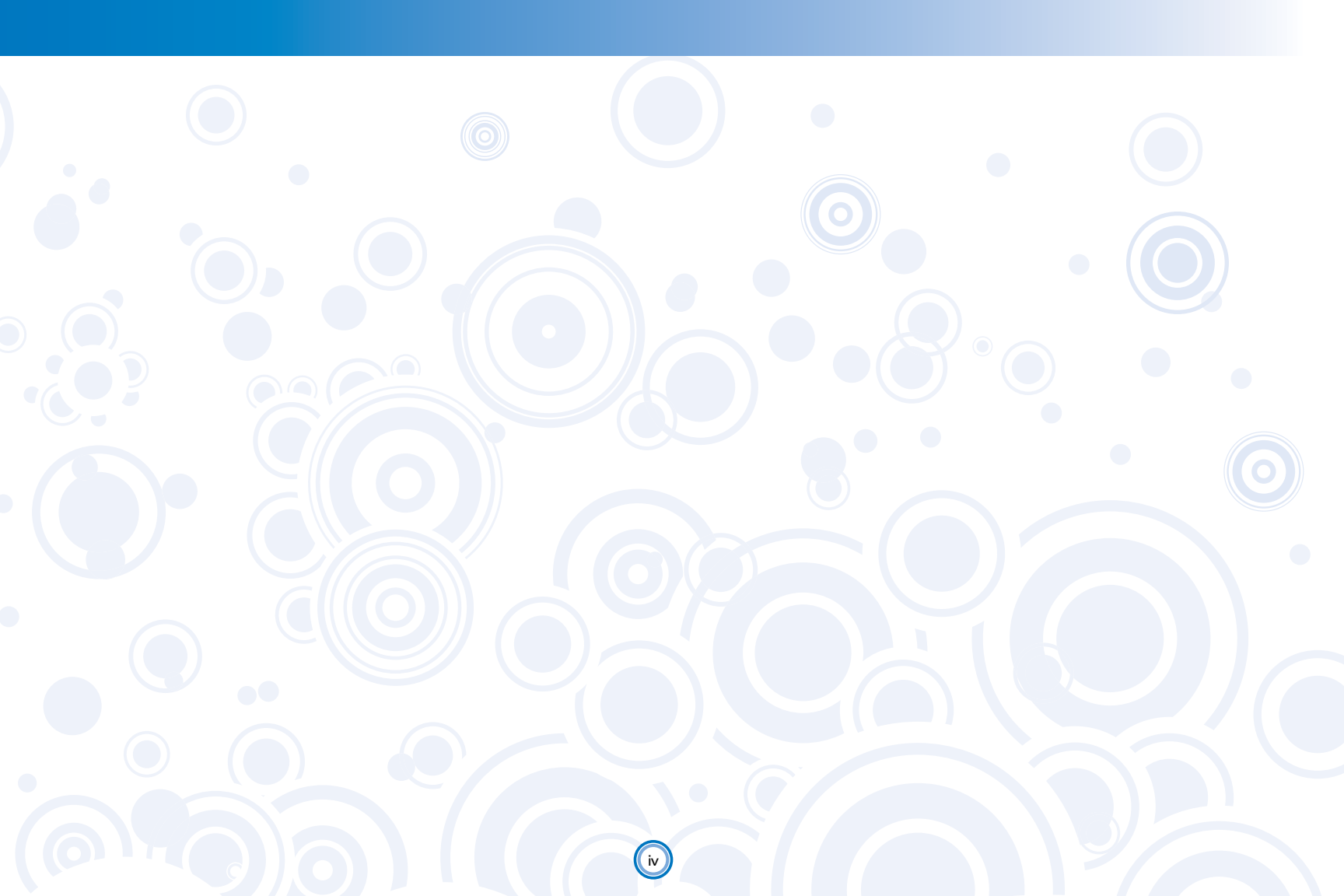
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## PREFACE

The Office of Women's Health (OWH) is dedicated to improving the health of women and girls. As part of this important effort, OWH has generated a timely report that provides insight into the current health status and well-being of young women and girls in California.

This report, *California Adolescent Health 2009*, was developed by OWH to provide a comprehensive overview of the health of young people in the state. Health-related information for both girls and boys has been included because much of the data depends on the sample size of the data sources and also because comparisons can provide a more dynamic view of youth in California.

The information contained in the report is intended for use by policymakers, educators, youth health advocates, and the general public. OWH also hopes that many California adolescents will find the

report of interest. *California Adolescent Health 2009* includes demographic data (from population and school statistics) and a wide range of health-related topics such as health indicators, health behaviors, mental health, reproductive health, nutrition, relationship of physical environment to health, and health services use.

The report drew information from three different data sources using a similar methodology: (1) the *California Health Interview Survey (CHIS)* from the University of California, Los Angeles, Center for Health Policy Research; (2) *The California Teen Eating, Exercise and Nutrition Survey (CalTEENS)* from the California Department of Public Health's Network for a Healthy California; and (3) the *Survey of Adolescent Well-Being (SAWB)* from the Survey Research Group of the Public Health Institute. (Each of these sources is described in detail in the Methodology Section.)

Additional data sources were obtained from the California Department of Education website, California Department of Finance, California Department of Alcohol and Drug Programs, and California Vital Statistics. Although we attempted to standardize terms and nomenclature, some variability was unavoidable due to the nature of the different sources. For example, CHIS has a large sample size that allows information access on a number of smaller race/ethnicity groups such as American Indian/Alaska Natives or Asians, whereas the California Women's Health Survey (CWHs) allows race/ethnicity breakdown to only four groups (White, Hispanic, Black/African American and Asian/Other).

The Office of Women's Health is pleased to present *California Adolescent Health 2009* as part of its ongoing commitment to monitor the public health of adolescents in California.

## INTRODUCTION

Adolescence is a critical time when development sets the course for either a healthy or unhealthy adulthood. While reproductive health tends to be the focus during this period, there is important physical and behavioral development that influences their health for years to come. Adolescence is also a time of vulnerability when teens are dependent on their parents and the environment they live in impacts their overall health and future health. This report examines the unique impact factors such as environment, family, school and volunteerism have on adolescent development.

The purpose of this report is to provide a snapshot of what is happening to the health of adolescents in California. The various topics highlighted reflect the public health perspective that health, community, safety and the environment contribute and influence our health; and that if we want to promote good

health, community and the environmental factors must be considered.

In the *“California Women’s Health 2007”* report, we examined population characteristics, health status and health utilization of women. In this report, we examine population characteristics, health status, health behaviors, reproductive health and several environmental factors. Population characteristics are different for adolescents, primarily reflecting their dependency on their parents and family. School and public program participation provide a glimpse of how many children depend on government programs to position themselves for success. Immigration status and volunteerism are unique indicators for future success and health.

This report highlights critical reproductive health behaviors that have a profound impact on adolescent health. The traditional list of health behaviors has been expanded to provide insight into whether



adolescents are on the road to healthy outcomes as adults. This list reflects important behaviors such as soda consumption, sunscreen use, substance abuse, use of firearms and dating abuse. These health behaviors function as a potential warning sign of the level of unhealthy behavior that may impede health and healthy development into adulthood.

The environment such as community, home and school impact the overall health of teens and is instrumental in their development into healthy adults. Neighborhood safety impacts the ability of teens to exercise and form healthy relationships and the ability to develop a healthy lifestyle. Volunteerism, truancy, household literacy, parental involvement, reliance of public programs, food insecurity, and the overall impact on outside responsibilities are important predictors of adolescent health. In the school environment, nutrition, school attendance, ability to walk or ride a bike to school, and physical fitness tests are examined. The report looks beyond

insurance status to capture aspects of the lives of adolescents that influence who they are and what kind of adults they become.

This report provides insight about California adolescents, and the impact policy decisions about resources, schools, community development and public safety have on the next generation.





## POPULATION CHARACTERISTICS

### INTRODUCTION

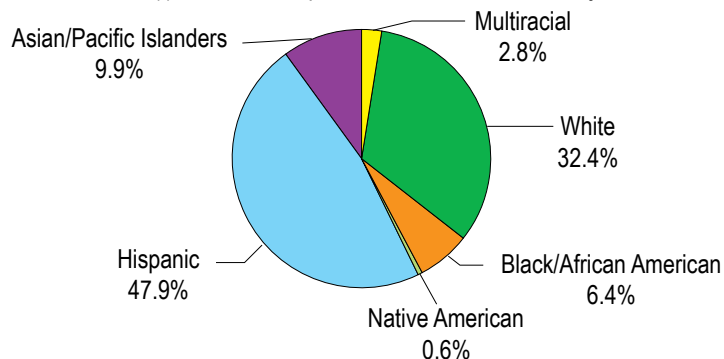
California's diverse population is reflected in the demographics of youth aged 12-17. Almost 3.5 million adolescents reside in California. Knowledge of the characteristics of this population can be used to develop and evaluate programs and policies as well as to inform advocates and legislators about adolescent health statewide. The following section presents population data on California adolescents, including age, race/ethnicity, school demographics, immigration status, employment status, public program participation, Medi-Cal eligibility, and volunteerism.

## ADOLESCENT DEMOGRAPHICS

The demographics of adolescents aged 12 to 17 reflect the diversity of California's population. The California Department of Finance projections for 2009 indicated that there would be 3,497,305 adolescents in California. With regard to race/ethnicity, the projected proportion of Hispanic youth was highest (47.9 percent), followed by Whites (32.4 percent), Asian/Pacific Islanders (9.9 percent), Black/African American (6.4 percent), Multiracial (2.8 percent), and Native American (0.6 percent).

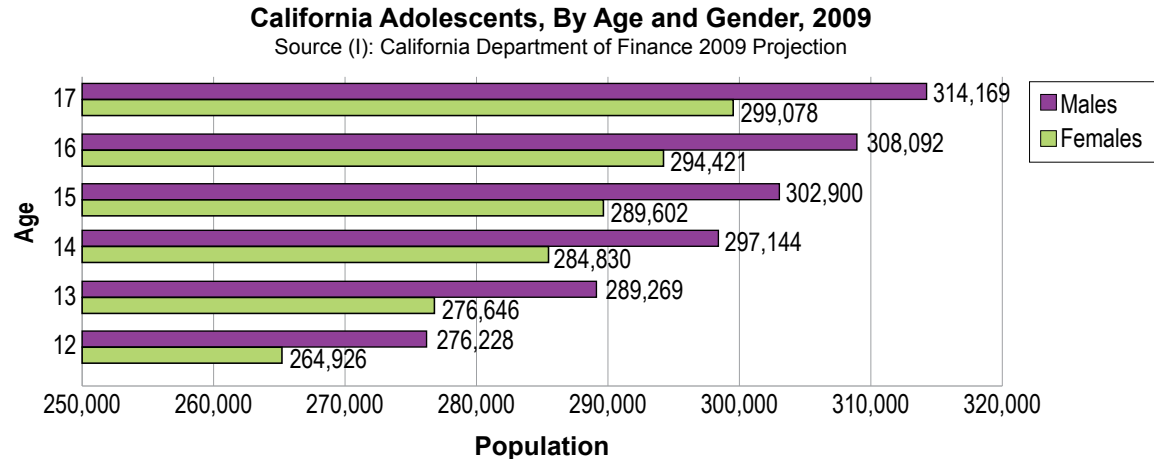
### California Adolescents (Aged 12 to 17), By Race/Ethnicity, 2009

Source (1): California Department of Finance 2009 Projection



Black/African Americans (6.4 percent), Multiracial youth (2.8 percent), and Native Americans (0.6 percent). Males would constitute 51.1 percent of the adolescent population, and females would make up 48.9 percent.<sup>1</sup> In each age group, the number of males was projected to be larger than the number of females.

<sup>1</sup> California Department of Finance, 2009. Available at <http://www.dof.ca.gov/html/DEMOGRAP/Data/RaceEthnic/Population-00-50/documents/2009.xls>.

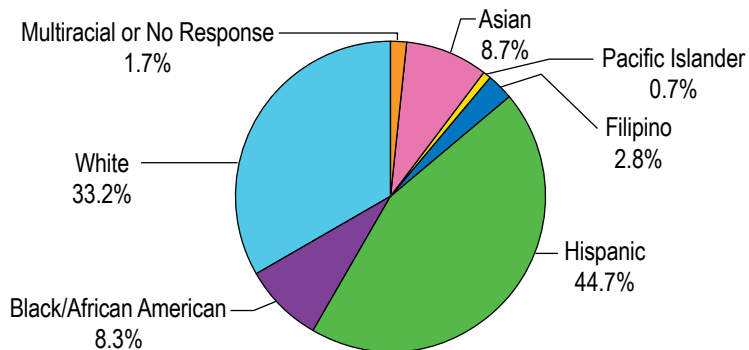


## PUBLIC SCHOOL DEMOGRAPHICS

California has a large public education system. Data from the California Department of Education indicate that 6,312,436 students attended public schools during the school year 2005-2006.<sup>1</sup> California students attended 9,553 schools, governed by almost 1,000 elected school boards. Traditionally, about 10 percent of California students have

### California School Enrollment Grades 7<sup>th</sup> thru 12<sup>th</sup>, By Race/Ethnicity, 2005-2006

Source (II): California Department of Education



attended private schools; the proportion has declined slightly in the last few years to closer to 9 percent.<sup>2</sup>

The gender and race/ethnicity distributions of school students reflect the state's demographics, with 51.4 percent males and 48.6 percent females. Among the race/ethnicity groups, Hispanics constituted the largest proportion of students (44.7 percent), followed by Whites (33.2 percent), Asians (8.7 percent), Black/African Americans (8.3 percent), Filipinos (2.8 percent),

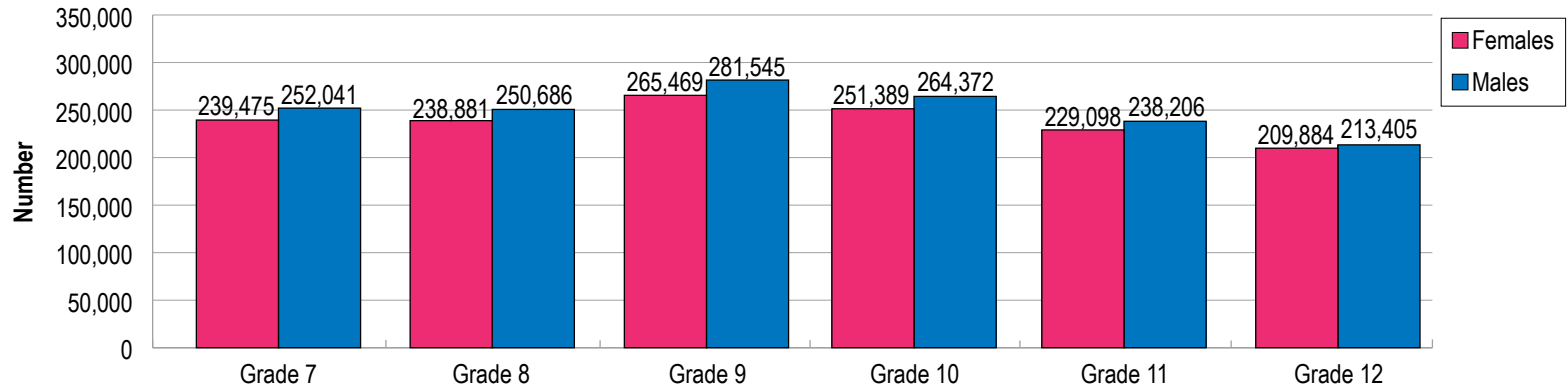
Multiracial students or no response (1.7 percent), and Pacific Islanders (0.7 percent). Of students attending public school, 2,986,618 attended grades seven through twelve.<sup>1</sup> Males outnumbered females in all grades from seven through twelve.

1 California Department of Education, 2007. Available at <http://dq.cde.ca.gov/dataquest/StEnrAll.asp?cChoice=StEnrAll&cYear=2005-06&cLevel=State&cTopic=Enrollment&myTimeFrame=S>.

2 California Department of Education, 2007. Available at <http://www.ed-data.k12.ca.us/Navigation/fsTwoPanel.asp?bottom=%2Fprofile%2Easp%3Flevel%3D04%26reportNumber%3D16>.

## California Public School Enrollment Grades 7<sup>th</sup> thru 12<sup>th</sup>, By Gender, 2005-2006

Source (II): California Department of Education





## IMMIGRATION STATUS AND NATIVITY

The Foreign-born population of the United States (U.S.) has grown since 1971.<sup>1</sup> According to the 2000 census nearly one in six U.S. children (younger than 18 years old) live with someone who is foreign-born.<sup>1</sup> In March 2005, 27.8 percent of California's population was foreign-born; most of these individuals (78.5 percent) were between the ages of 20 and 64.<sup>2</sup>

During 2003 and 2005, 86.5 percent of California Health Interview Survey adolescent respondents reported that they were U.S.-born citizens, 4.3 percent indicated they were naturalized citizens, and 9.3 percent said that they were permanent residents. The majority of the respondents who were not born in this country reported being born in Mexico (7.5 percent of all respondents), followed by Asian and Pacific Islands (3.7 percent), Central America (0.7 percent), and Europe (0.7 percent).

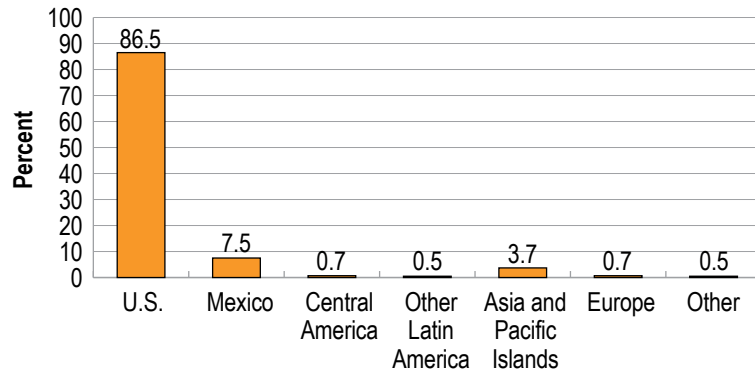


Slightly more than half of the respondents (55.2 percent) reported speaking English only at home. This was followed by respondents speaking English and Spanish (29.6 percent) and English and other languages (7.6 percent). Spanish only was spoken in 3.9 percent of homes. Among the race/ethnicity groups, Asians (65.9 percent) and Hispanics (79.7 percent) reported lower rates of U.S. citizenship, compared to the remaining groups.

- 1 Schmidley, A.D., 2001. *Profile of the Foreign-Born Population in the United States : 2000*. Current Population Reports (p. 23-206). <http://www.2010census.biz/prod/2002pubs/p23-206.pdf>.
- 2 Demographic Research Unit, California Department of Finance, *Current Population Survey Report*, March 2005, p. 19. Available at [http://www.dof.ca.gov/HTML/DEMOGRAP/ReportsPapers/documents/CPS\\_Extended\\_3-05.pdf](http://www.dof.ca.gov/HTML/DEMOGRAP/ReportsPapers/documents/CPS_Extended_3-05.pdf).

## Country of Birth, 2003 & 2005

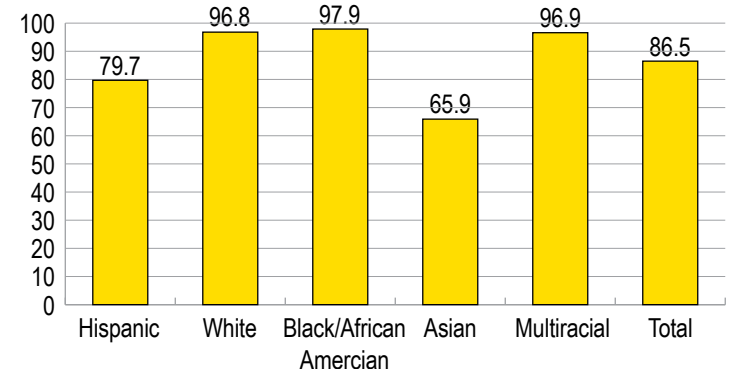
Source (III): California Health Interview Survey (AskCHIS)



NOTE: Each bar represents a percentage of the total population of adolescents aged 12 to 17.

## U.S. Born Citizen, By Race/Ethnicity, 2003 & 2005

Source (III): California Health Interview Survey (AskCHIS)





## EMPLOYMENT

Employment has been shown to be associated with positive and negative consequences for youth.<sup>1</sup> National data has found that employment with limited intensity (20 or less hours per week) may increase responsibility and self-esteem and have positive effects on educational attainment and subsequent employment, while high intensity employment may be associated with unhealthy outcomes (i.e., substance use and aggressive behavior in males).<sup>1</sup> Research indicates that work quality is also consequential for mental health.<sup>2</sup>

During 2005, 41.9 percent of California Health Interview Survey adolescent respondents reported that they had worked for pay in the previous 12 months. Work for pay rates varied by race/ethnicity, with Whites reporting the highest rates of employment (55.9 percent), followed by the Multiracial group (49.6 percent). Asians reported the lowest rates of work for pay (19.7 percent).

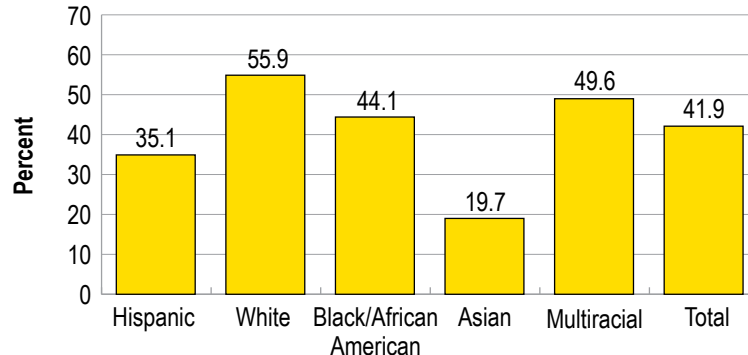
Work for pay rates varied by income level, with youth at the 200 percent and below federal poverty level (FPL) reporting lower rates of work for pay (30.1 percent), compared with youth above 200 percent of the FPL (50.2 percent). A higher proportion of males in the 200 percent and below FPL (36.4 percent) worked for pay, compared with females (24.1 percent). Among the youth who worked for pay, 78.0 percent said that they worked during the school year. The number of hours worked

during the school year varied between one and more than twenty-one hours.

- 1 *Commission on Behavioral and Social Sciences and Education, National Research Council and Institute of Medicine, Protecting Youth at Work: Health, Safety, and Development of Working Children and Adolescents in the United States, Washington, D.C.: The National Academies Press, 1998, p. 3. Available at [http://books.nap.edu/openbook.php?record\\_id=6019&page=7](http://books.nap.edu/openbook.php?record_id=6019&page=7).*
- 2 *Mortimer, J.T., Harley, C., and Staff, J., 2002. The Quality of Work and Youth Mental Health. Work and Occupations 29(2): 166-197.*

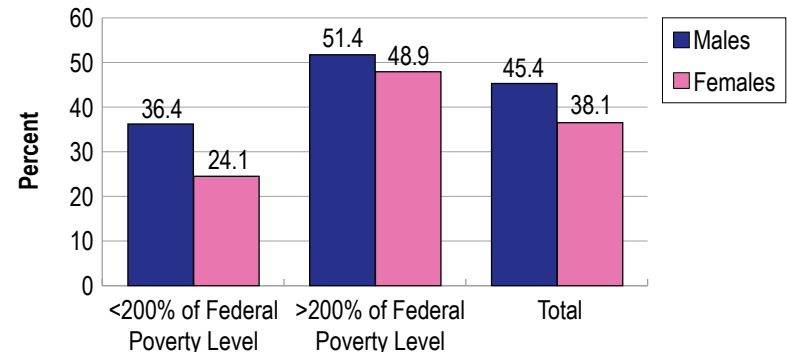
## Worked for Pay in the Previous 12 Months, By Race/Ethnicity, 2005

Source (III): California Health Interview Survey (AskCHIS)



## Worked for Pay in the Previous 12 Months, By Income Level and Gender, 2005

Source (III): California Health Interview Survey (AskCHIS)



## PUBLIC PROGRAM PARTICIPATION

In recent years, there has been some speculation that public assistance programs such as Food Stamps and Temporary Assistance to Needy Families (TANF) are being underutilized by eligible families. In California, it is estimated that 11.7 percent of households live with food insecurity<sup>1</sup> and 13.3 percent of the population lives in poverty.<sup>2</sup>

According to the 2005 Survey of Adolescent Well-Being, almost one in five (17.2 percent) of adolescents in California lives in a household where the parent or adolescent reported having ever participated in public assistance programs such as free school breakfast or lunch; food stamps; welfare; or Women, Infants and Children (WIC). Only 6.1 percent of white adolescents reported using public programs, while 23.7 percent of non-white adolescents used public assistance programs.

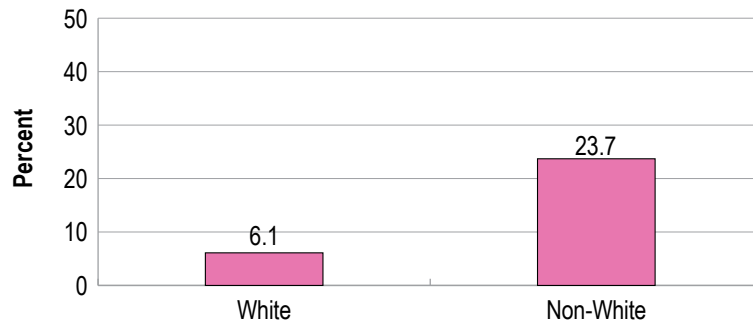


Of adolescents living in households with incomes below the federal poverty level (FPL), 52.0 percent used these programs, much more than the 20.1 percent of those with household incomes 100 percent to 200 percent of poverty level, and the 5.6 percent of those in households making more than 200 percent of the FPL.

- 1 M. Nord, M. Andrews and S. Carlson, "Household food security in the United States, 2005," *Economic Research Service Report Summary*, Washington, D.C.: U. S. Department of Agriculture, 2006, p. 64.
- 2 D. Reed, "Poverty in California: Moving beyond the federal measure," *California Counts: Population Trends and Profiles*, San Francisco, California: Public Policy Institute of California, 7, 4, 2006, 1.

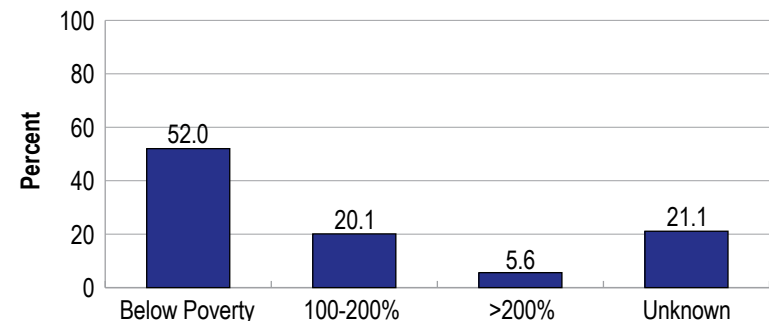
## Percent of Adolescents Participating in Public Programs, By Race/Ethnicity, 2005

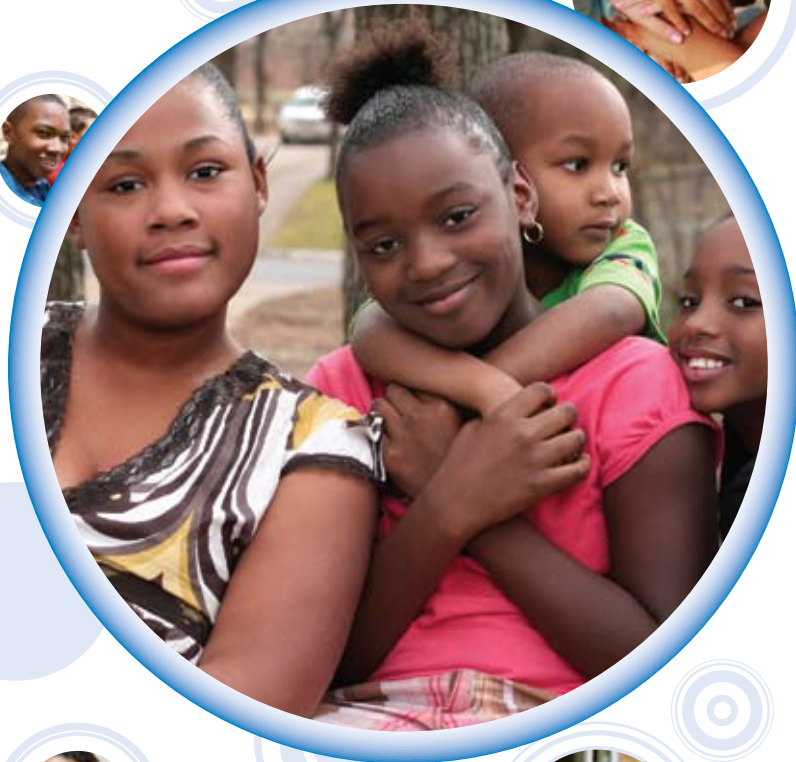
Source (VI): Survey of Adolescent Well-Being (SAWB)



## Percent of Adolescents Participating in Public Programs, By Federal Poverty Level, 2005

Source (VI): Survey of Adolescent Well-Being (SAWB)



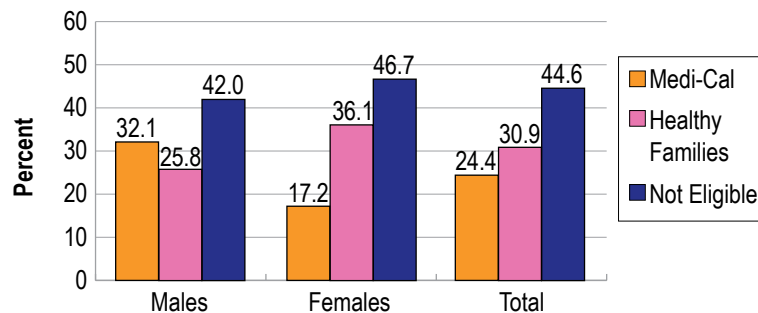


## MEDI-CAL AND HEALTHY FAMILIES ELIGIBILITY

Lack of health insurance may have adverse effects on health status. Uninsured children and adults do not receive the care they need. They suffer from poorer health and development and are more likely to die earlier than insured individuals.<sup>1</sup> Uninsured adolescents may be eligible for public health programs such as Medi-Cal<sup>2</sup> or Healthy Families,<sup>3</sup>

### Eligibility of the Uninsured for the Medi-Cal or Healthy Families Programs, By Gender, 2003 & 2005

Source (III): California Health Interview Survey (AskCHIS)



NOTE: Each bar represents a percentage of the total population of that gender or group.



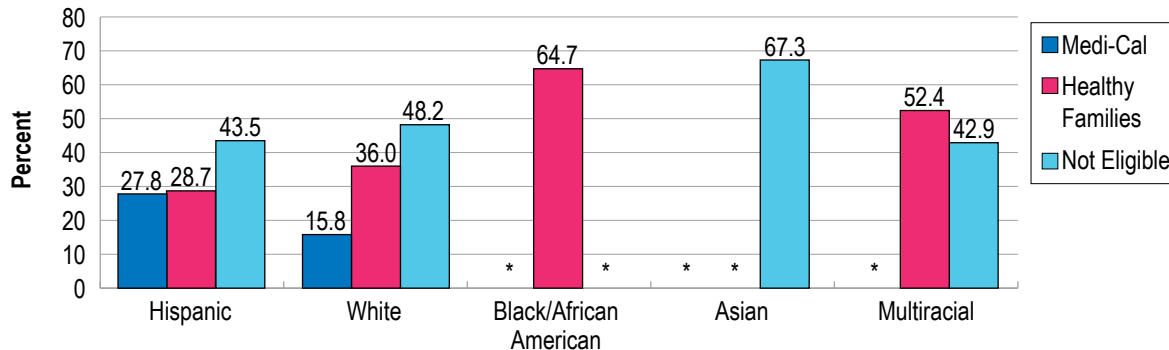
but they may not know about these programs.<sup>4</sup> CHIS administrators estimated uninsured respondents' and families' eligibility for the programs by using age, insurance, family type, and citizenship information for the years 2003 and 2005.

During 2003 and 2005, 8.5 percent of California Health Interview Survey adolescent respondents were uninsured. Of those, 24.4 percent were eligible for Medi-Cal, 30.9 percent were eligible for Healthy

Families, and 44.6 percent were ineligible for either of these programs. Males had higher rates of Medi-Cal eligibles (32.1 percent), compared to females (17.2 percent). Among the race/ethnicity groups, the highest rates of Healthy Families eligibles were among Black/African Americans (64.7 percent), followed by the Multiracial group (52.4 percent). The highest rate of ineligibles was among Asians (67.3 percent).

## Eligibility of Uninsured Individuals for the Medi-Cal or Healthy Families Programs, By Race/Ethnicity, 2003 & 2005

Source (III): California Health Interview Survey (AskCHIS)



\*Sample size too small – data are unreliable

# POPULATION CHARACTERISTICS

- 1 *Institute of Medicine of the National Academies, Insuring America's Health: Principles and Recommendations, Washington, D.C.: The National Academies Press, 2004, p. 2.. Available at <http://www.iom.edu/CMS/3809/4660/17632.aspx>.*
- 2 *California Department of Health Care Services, 2007. Available at <http://www.healthyfamilies.ca.gov/hfhome.asp>.*
- 3 *California Department of Health Care Services, 2007. Available at <http://www.dhs.ca.gov/mcs/mcpd/MEB/default.htm>.*
- 4 *Kincheloe, J.R. and Brown, E.R. (2007). The Effects of County "Outreach Environment" on Family Participation on Medi-Cal and Healthy Families. Available at [http://www.healthpolicy.ucla.edu/pubs/files/Fam\\_Part\\_MediCal\\_Hlthy\\_Families\\_RT082007.pdf](http://www.healthpolicy.ucla.edu/pubs/files/Fam_Part_MediCal_Hlthy_Families_RT082007.pdf).*



## VOLUNTEERISM

Adolescents who volunteer for community-related activities have been found to perform better in school, and they are less likely to be involved in risky behavior.<sup>1,2</sup>

According to the 2005 Survey of Adolescent Well-Being (SAWB), nearly half of all adolescents in California volunteer some of their time, with 49.6 percent of females and 40.9 percent of males responding that they do some kind of volunteer work. Adolescents of all ages, race/ethnicities and incomes volunteer at approximately the same rate.

Many adolescents volunteer for several hours per week. Of those who volunteer, 21.7 percent give more than five hours per week; 20.3 percent give three to five hours; 31.7 percent give one to three hours; and 26.4 percent give one hour or less per week. Most adolescents who do volunteer work



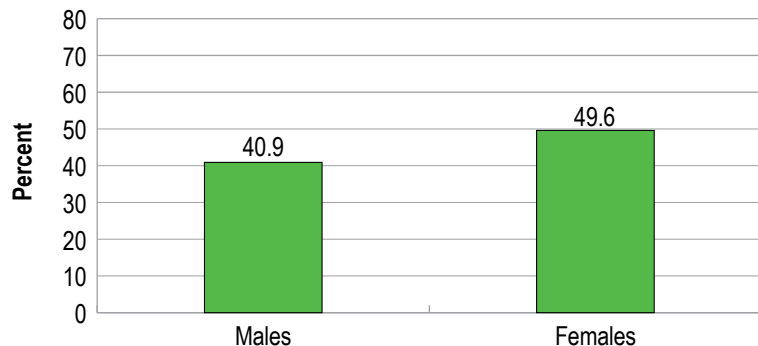
# POPULATION CHARACTERISTICS

report that these activities do not adversely affect their school performance. Only 6.3 percent say that their schoolwork suffers because of the time they spend volunteering.

- 1 Zaff, Jonathan and Erik Michelsen. (October 2002). *Child Trends Research Brief: Encouraging Civic Engagement: How Teens Are (or Are Not) Becoming Responsible Citizens*.
- 2 National Commission on Service Learning (2001). *The Power of Service-Learning for American Schools* (Online). Available: <http://servicelearningcommission.org/slcommission/report.html>

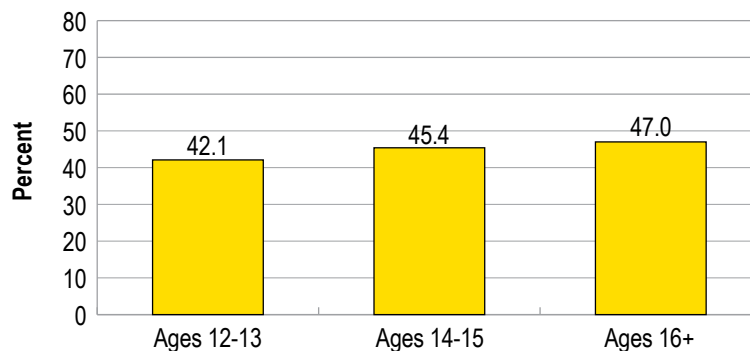
## Adolescents Who Volunteer, By Gender, 2005

Source (VI): Survey of Adolescent Well-Being (SAWB)



## Adolescents Who Volunteer, By Age Group, 2005

Source (VI): Survey of Adolescent Well-Being (SAWB)





## ENVIRONMENT

| Community Environment | Home Environment | School Environment |

### INTRODUCTION

The environment in which an adolescent lives, works and attends school shapes his or her social norms and has an impact on personal behaviors, including those related to health. California adolescents are exposed to a wide variety of environments that may either support or discourage healthy attitudes, beliefs and actions. The following section presents data on the community environment, the home environment and the school environment, each of which provides unique insights into the health status of youth in California.

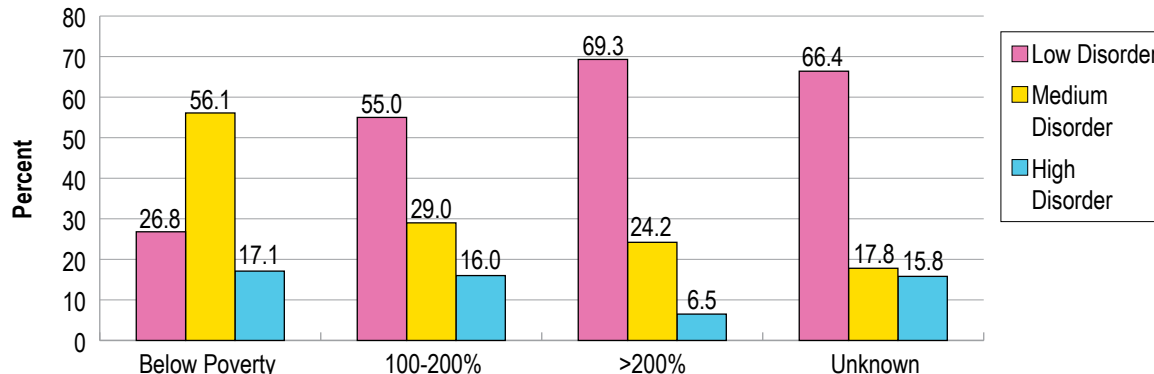
## NEIGHBORHOOD DISORDER

An adolescent's surrounding community has been considered a primary force in socialization.<sup>1</sup> Furthermore, evidence suggests that the social environment of a neighborhood is associated with general health and health perceptions in children and adolescents.<sup>2</sup>

Using the Community Dilapidation and Deviance Scales, 2005 Survey of Adolescent Well-Being (SAWB) respondents were asked a series of questions regarding how large a problem certain occurrences presented in their neighborhood. Survey questions included topics such as trash or broken glass in the streets, graffiti, vacant/deserted buildings, drinking in public, selling or using drugs, people hanging out and causing trouble, and gang

**Neighborhood Disorder, By Federal Poverty Level, 2005**

Source (VI): Survey of Adolescent Well-Being (SAWB)



NOTE: Each bar represents a percentage of the total population of that poverty level.

violence. Respondents were also asked whether a place existed where they could play besides the street, and whether buildings and equipment in local parks were kept in good order.<sup>3</sup>

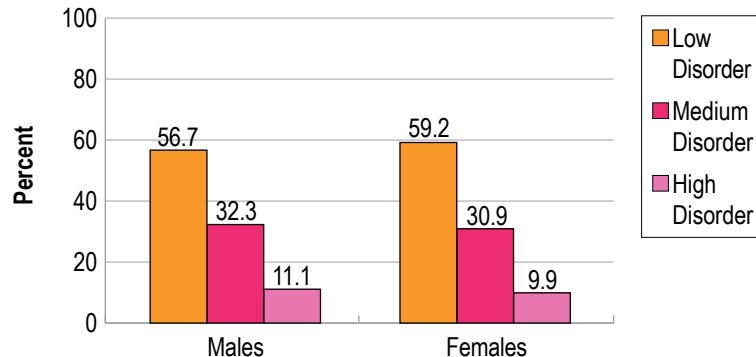
Overall, 10.5 percent of adolescents reported living in neighborhoods with a high level of disorder. Respondents who lived in households below the federal poverty level (FPL) reported higher levels of neighborhood disorder (17.1 percent). Adolescent

males and females reported similar levels of low neighborhood disorder, (56.7 percent and 59.2 percent, respectively).

- 1 Amon, S., Shamai, S., and Ilatov, Z., *Socialization agents and activities of young adolescents*, *Adolescence*, Vol. 43, No. 170, Summer 2008, 373-397.
- 2 Drukker, M., Kaplan, C., Feron, F., and van Os, J., *Children's health-related quality of life, neighborhood socio-economic deprivation and social capital: A contextual analysis*, *Social Science and Medicine*, 57, 2003, 825-841.
- 3 Responses were scored individually, normalized and then summed to produce an overall score.

## Neighborhood Disorder, By Gender, 2005

Source (VI): Survey of Adolescent Well-Being (SAWB)



NOTE: Each bar represents a percentage of the total population of that gender.



## CHILDCARE RESPONSIBILITIES

Interactions between older and younger siblings can help shape emotional, psychological and cognitive development. Adolescents who are charged with caregiving roles of younger children are often influential in the formation of social skills and peer relationships.<sup>1</sup>

When respondents to the 2005 Survey of Adolescent Well-Being (SAWB) were asked whether they had responsibilities caring for young children in the household (not paid babysitting), about 22 percent of adolescents reported that they did. There did not appear to be any differences by gender in those reporting. Adolescents aged 14 to 15 were slightly more likely to report child care responsibilities than those in other age groups.

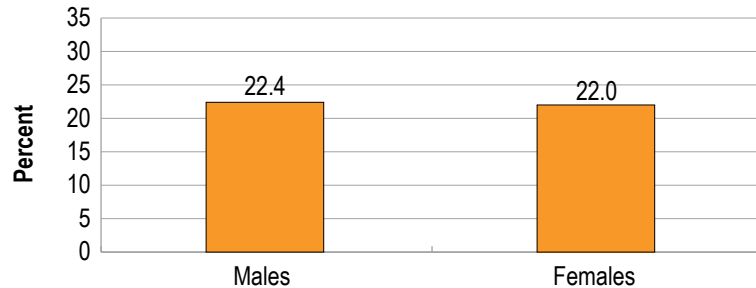
While the scope of the SAWB did not include items about lack of adult supervision for children, some

speculation exists that adolescents – particularly those from households that receive welfare – have not only been left unsupervised, but also appear to be caring for younger siblings.<sup>2</sup> Some adolescents reported having difficulties with the responsibility. Of those adolescents who reported that they cared for young children in the home, 17.7 percent stated that their school work suffered because of this responsibility.

- 1 Brody, G.H., *Siblings' direct and indirect contributions to child development*, American Psychological Society, 13, No. 3, 2004, 124-126.
- 2 Morris, P., Knox, V. and Gennetian, L.A., *Welfare policies matter for children and youth: Lessons for TANF reauthorization (Policy Brief)*, New York: Manpower Demonstration Research Corporation, 2002, p. 1.

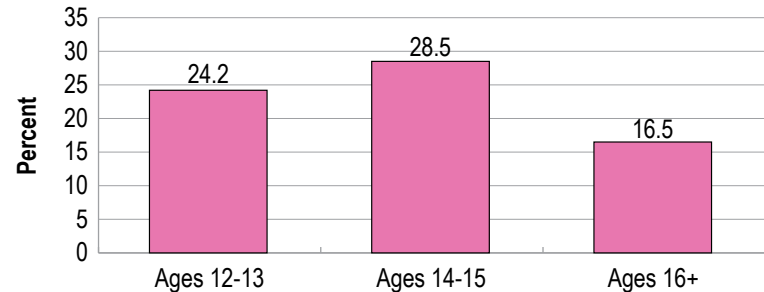
## Adolescents Who Have Childcare Responsibilities in Their Home, By Gender, 2005

Source (VI): Survey of Adolescent Well-Being (SAWB)



## Adolescents Who Have Childcare Responsibilities in Their Home, By Age Group, 2005

Source (VI): Survey of Adolescent Well-Being (SAWB)





## **FOOD INSECURITY, HUNGER AND NUTRITION ASSISTANCE**

Associations between food insecurity and poor-quality diets can lead to nutrient deficiencies and affect health status.<sup>1</sup> In 2000, more than one-third (36.9 percent) of 12 to 17-year-olds in California lived in households at or below 185 percent of the federal poverty level – more than one million teens. Of those from low income homes ( $\leq$  185 FPL), 80.8 percent of adolescents were non-White,<sup>2</sup> demonstrating the disproportionate number of non-White teens who are poor in California. Specific groups of minority youth are much more likely to be low-income ( $\leq$  185 percent FPL) than White teens<sup>2</sup> (47.1 percent of Black/African American and 53.6 percent of Hispanic teens vs. 18.7 percent of White teens) and thus at higher risk for food insecurity.

Questions posed by the 2004 CalTEENS on hunger, household use of food assistance programs, and school meal participation, provide some insight into

the low-income teen population. In 2004, 15.8 percent of teens reported that their household used the Food Stamp Program, and 12.2 percent reported family use of Women, Infants and Children (WIC) funds in the last 12 months. In 2004, 15.2 percent of California families were income-eligible for food stamps ( $\leq$  130 percent FPL) and 21.5 percent were eligible for WIC (women pregnant or breastfeeding or with children  $\leq$  5 years of age and  $\leq$  185 percent FPL).<sup>3</sup> Black/African American and Asian/Other teens reported being hungry in the past year because “there was not enough food in the house” significantly more often than White and Hispanic teens (8.3 and 6.5 vs. 1.8 and 3.6 percent respectively).

In 2004, Hispanic and Black/African American teens were more likely to report receiving free or reduced price meals compared to Asian/Other and White teens (48.1 percent, 35.7 percent, 30.2 percent and 16.7 percent, respectively). Teens who were at income-related food risk (IRFR)<sup>4</sup> were predominantly Black/

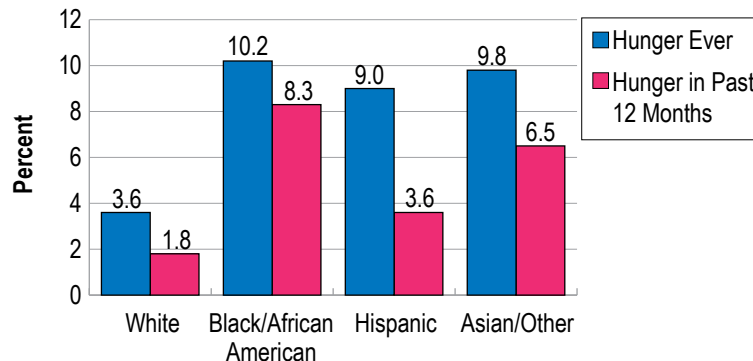


African American compared to Hispanic, Asian/Other and White teens (32.0 percent vs. 20.3 percent, 20.3 percent and 10.5 percent, respectively) and less of the teens experiencing IRFR were overweight or at risk for overweight (15.3 percent) compared to teens not at risk for being overweight (21.3 percent).

- 1 Harrison, G., Manalo-LeClair, G., Ramirez, A., Chia, Y.J., Kurata, J., McGarvey, N., and Sharp, M., *More Than 2.9 million Californians Now Food Insecure, One in Three Low-income: An Increase in Just Two Years*, Health Policy Research Brief, University of California, Los Angeles, 2005, pp. 1-12.
- 2 U.S. Census Bureau, 2000. <http://www.census.gov/main/www/cen2000.html>.
- 3 Food Stamp-eligible estimate based on 2000 U.S. Census, and WIC-eligible based on estimate from 2004 WIC program data and 2005 American Community Survey.
- 4 Income-related food risk (IRFR) included teens who reported being hungry in the past 12 months or lived in households that received food stamps or WIC food assistance.

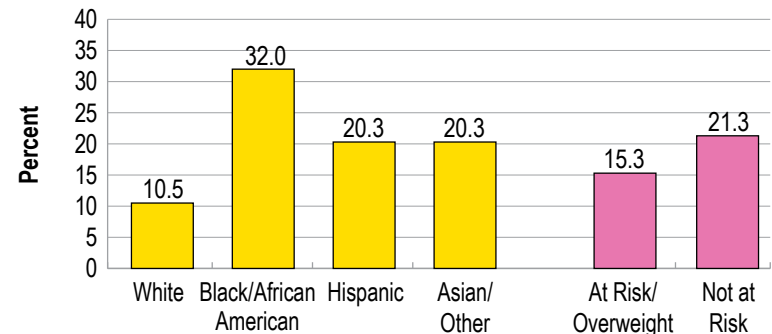
### Hunger, By Race/Ethnicity, California Teens, 2004

Source (V): California Teen Eating, Exercise and Nutrition Survey (CalTEENS)



### Reported IRFR\*, By Race/Ethnicity & Weight Status, California Teens, 2004

Source (V): California Teen Eating, Exercise and Nutrition Survey (CalTEENS)



\*IRFR = Income Related Food Risk



## HOUSEHOLD LITERACY

Research suggests an association between household literacy rates and health outcomes. A review of the literature linked higher rates of disease, death, and increased hospital use where literacy rates were low.<sup>1</sup>

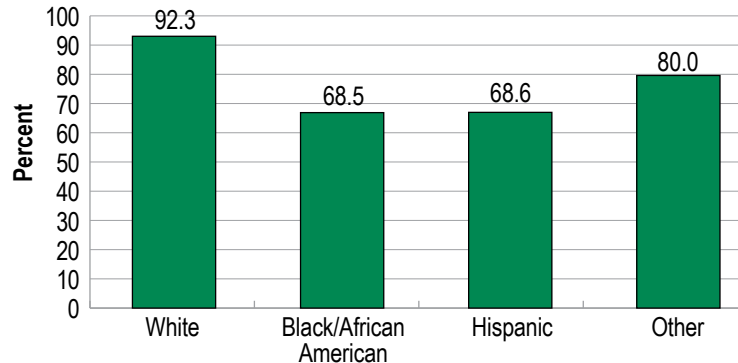
The National Assessment of Educational Progress (NAEP) developed a short, four-item scale that has been used as an element in the construct of socioeconomic status (SES).<sup>2</sup> This scale has also been referred to as a measure of the “home learning environment.” The NAEP uses the scale as a predictor of school achievement as mediated by the home environment. The four items that constitute the scale are questions about whether: (1) a household regularly receives magazines; (2) a household regularly takes delivery of a newspaper; (3) there is an encyclopedia in the home; and (4) there are more than 25 books in a household.<sup>3</sup>

Results from the 2005 Survey of Adolescent Well-Being show that Black/African American and Hispanic adolescents are less likely to report moderate-to-high household literacy. In addition, 54.3 percent of adolescents living in households below the FPL are in literacy-friendly homes, compared to 86.3 percent of those adolescents living in households with incomes 200 percent of the FPL or above.

- 1 DeWalt, D.A., Berkman, N.D., Sheridan, S.L., Lohr, K.N., and Pignone, M. *Literacy and health outcomes: A systematic review of the literature.* *J Gen Intern Med.* 2004;19:1228-39.
- 2 Von Secker, C. *Science achievement in social contexts: Analysis from National Assessment of Educational Progress, The Journal of Educational Research,* 98, No. 2, 67-78, Nov./Dec. 2004.
- 3 *Moderate household literacy was determined for respondents who answered positively to three items on the scale; high household literacy was determined for respondents who answered positively to all four items.*

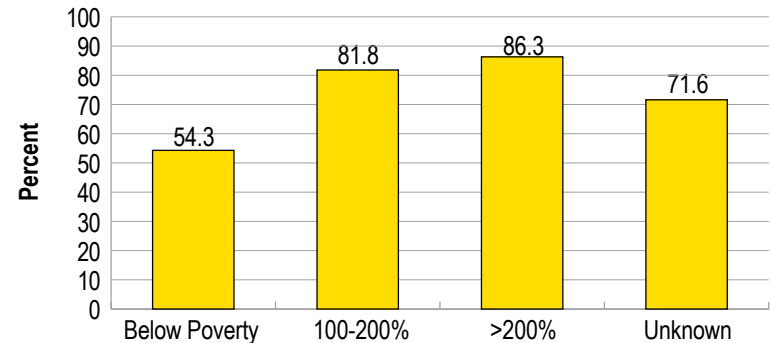
## Adolescents with Moderate to High Household Literacy, By Race/Ethnicity, 2005

Source (VI): Survey of Adolescent Well-Being (SAWB)



## Adolescents with Moderate to High Household Literacy, By Federal Poverty Level, 2005

Source (VI): Survey of Adolescent Well-Being (SAWB)



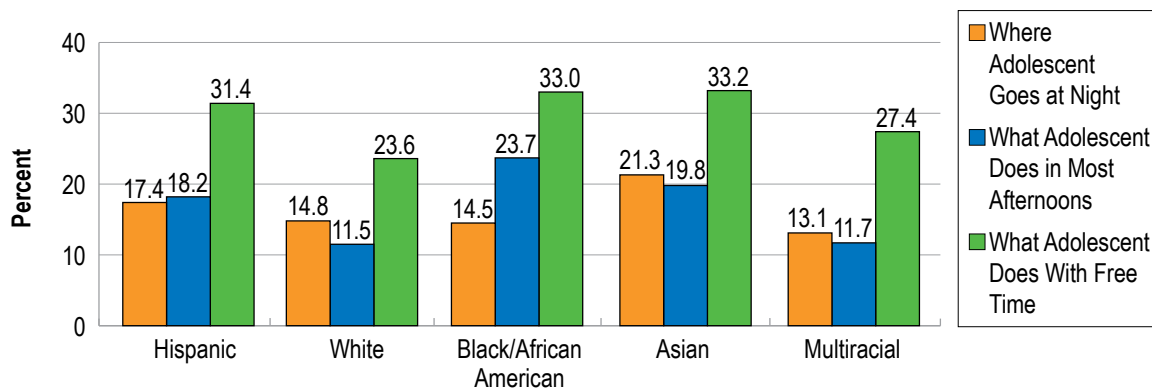
## PARENTAL MONITORING

Parental monitoring can be one aspect of an adolescent's perception of the amount of knowledge his or her parents have about the people with whom the adolescent associates and where he or she goes outside of home and school.<sup>1</sup> Less perceived parental monitoring has been associated with anti-social activities, risk-taking behaviors, and more frequent substance abuse.<sup>1,2</sup>

During the 2005 California Health Interview Survey, adolescent respondents were asked how much their parents or guardians really knew about: (1) where they were going at night; (2) where they were most afternoons after school; and (3) what they did with their free time. Most of the youth said that their parents knew where they were going at night (77.9 percent), where they were after school (83.9 percent), and what they did with their free time (71.4 percent).

**Parent/Guardian Knows Little or Nothing About Adolescent's Activities, By Race/Ethnicity, 2005**

Source (III): California Health Interview Survey (AskCHIS)



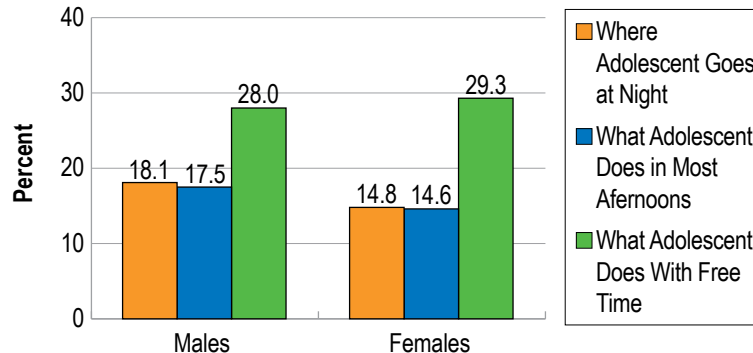
When examined by race/ethnicity and the different activities, Asians reported the highest rates for parent or guardians knowing little or nothing about where they went at night (21.3 percent) and Black/African Americans reported higher rates of parents or guardians knowing little or nothing about their activities after school (23.7 percent). At least one-third of Hispanics (31.4 percent), Black/African Americans (33.0 percent), and Asians (33.2 percent) reported that their parents or guardians knew little

or nothing about what they were doing during their free time. No significant gender differences were observed for parental or guardian knowledge about the adolescent's whereabouts.

- 1 DiClemente, R.J., Wingood, G.M., Crosby, R., et al., *Parental Monitoring: Association with adolescents' risk behaviors*, *Pediatrics*, 107, 2001, 1363-1368. Available at <http://pediatrics.aappublications.org/cgi/reprint/107/6/1363>.
- 2 National Institute on Drug Abuse (NIDA), 2007. Available at [http://www.drugabuse.gov/NIDA\\_notes/NNVol18N2/Relationships.html](http://www.drugabuse.gov/NIDA_notes/NNVol18N2/Relationships.html).

### Parent/Guardian Knows Little or Nothing About Adolescent's Activities, By Gender, 2005

Source (III): California Health Interview Survey (AskCHIS)





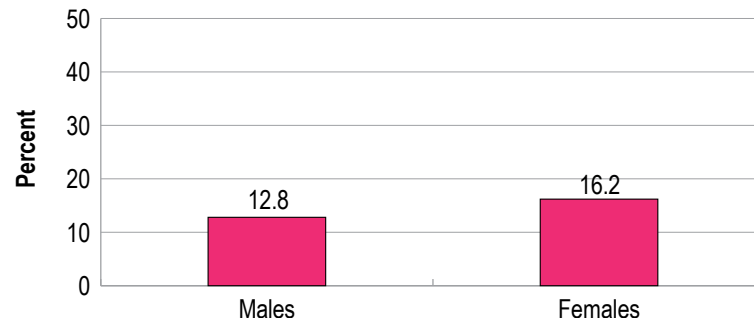
## IMPACT OF OUTSIDE RESPONSIBILITIES

There has been some speculation that adolescents are undertaking too many non-school responsibilities, sometimes referred to as “overscheduling.”

Respondents to the 2005 Survey of Adolescent Well-Being were asked about the impact of non-school activities on their school work. While females reported their school work suffered slightly more often than males, no statistically significant difference

### Adolescents Whose Schoolwork Suffered from Other Responsibilities, By Gender, 2005

Source (VI): Survey of Adolescent Well-Being (SAWB)



was found. Overall, 14.5 percent of adolescents reported that at least one of the four specific non-school responsibilities (childcare, chores, paid work, and volunteer work) interfered with their school work. Respondents reported higher rates of school work suffering when adolescents reported participating in child care (17.7 percent) and having a job (11.9 percent).

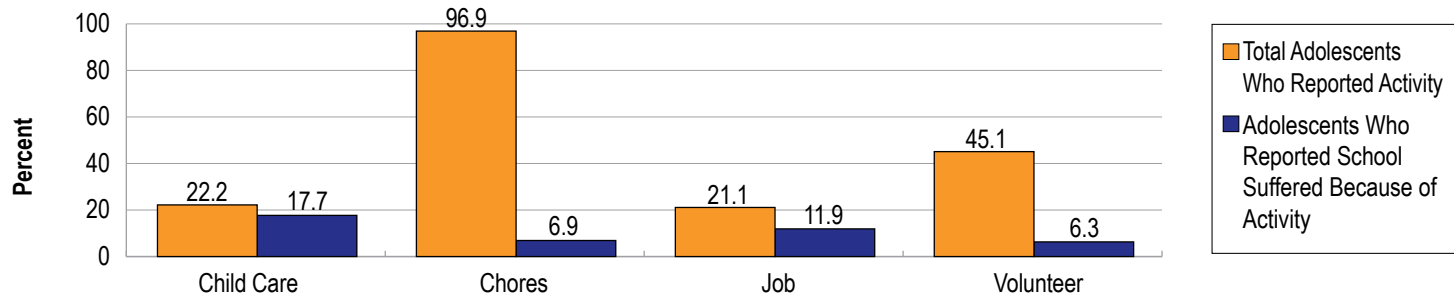
Older and non-White adolescents were more likely to report that their school work suffered because of outside responsibilities. While it has been found that

adolescents who perform work outside of school may benefit from the increased responsibilities, problem behaviors may appear when these jobs require more than 20 hours per week.<sup>2</sup> These behaviors might include lack of sleep and exercise, poor nutrition, and lower levels of success in school.

- 1 Luther, S.S., Shoum, K.A., and Brown, P.J. *Extracurricular involvement among affluent youth: A scapegoat for "ubiquitous achievement pressures"?*. *Developmental Psychology*. Vol 42(3), May 2006, 583-597.
- 2 *Commission on Behavioral and Social Sciences and Education, Protecting Youth at Work: Health, Safety, and Development of Working Children and Adolescents in the United States*, Washington, D.C.: National Academy Press, 1998, pp. 113-114.

### California Adolescents Reporting Extracurricular Activities & Whether School Work Suffers Because of Them, 2005

Source (VI): Survey of Adolescent Well-Being (SAWB)





## LOW-NUTRIENT FOODS AT SCHOOL

Youth spend a considerable amount of time at school. Consequently, support for healthy nutrition and physical activity behaviors through policies, coupled with the availability of quality foods and facilities, can greatly impact teen health status.

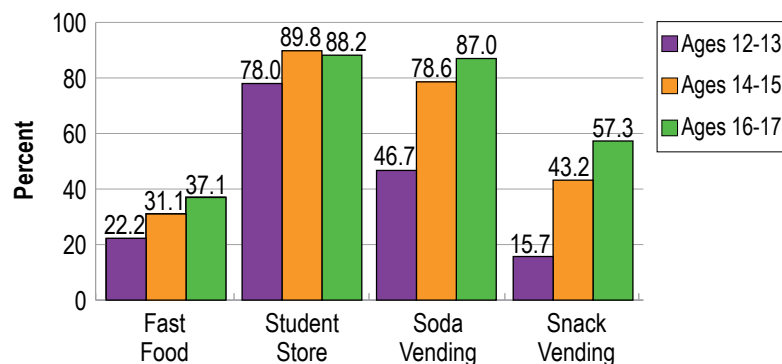
On the 2004 CalTEENS, California youth reported high rates of exposure to high-calorie, low-nutrient foods in school, particularly as grade levels increase. By age 14, many students reported having student stores selling junk food and the presence of soda vending machines on campus. More than three out of four teens (78.6 percent) aged 14 to 15 reported soda vending machines at their school, and most (89.8 percent) reported access to a student store that sold chips, cookies and soda.

In addition, almost one-third (31.1 percent) of teens aged 14 to 15 reported that fast food restaurants

served food at their school. Adolescents eating school lunch were more likely to report consumption of deep fried foods (23.3 percent), yet they also were more likely to report eating five daily servings of fruits and vegetables (53.3 percent) compared to adolescents not eating school lunches (17.1 percent and 41.9 percent, respectively).

### Availability of Unhealthy Food on Campus, By Age Group, California Teens, 2004

Source (V): California Teen Eating, Exercise and Nutrition Survey (CalTEENS)

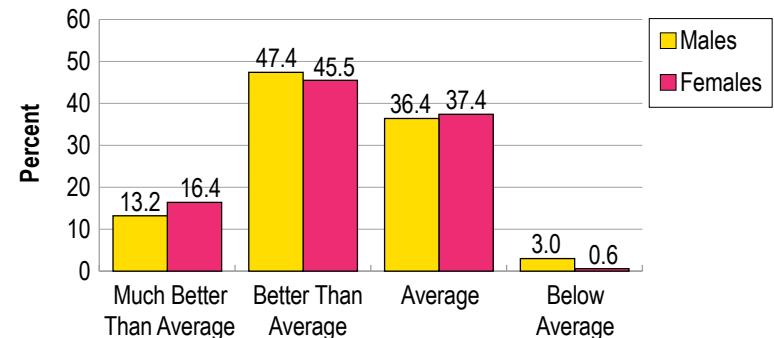


## SUCCESS IN SCHOOL

Positive academic outcomes have been linked with positive attitudes towards school.<sup>1</sup> According to the 2005 Survey of Adolescent Well-Being data, most adolescents in California reported they like school somewhat (49.9 percent) or a lot (39.0 percent), and most also felt that they perform better than average (46.5 percent) or much better than average (14.8 percent) in their classes. Males and females did not

### Adolescents' Perceived School Performance, By Gender, 2005

Source (VI): Survey of Adolescent Well-Being (SAWB)



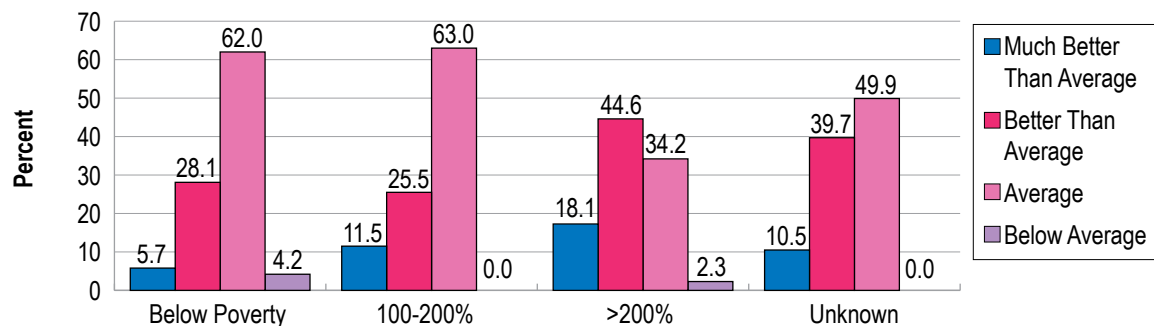
differ regarding how they felt they were performing in school, although slightly larger number of females reported that they performed much better than average.

Notably, only 5.7 percent of adolescents from households with incomes below the federal poverty level felt they performed much better than average in school, while 18.1 percent of those with household incomes above 200 percent of the FPL felt they performed much better than average.

1. Roeser, R.W., Eccles, J.S., and Sameroff, A.J.. *School as a Context of Early Adolescents' Academic and Social-Emotional Development: A Summary of Research Findings. The Elementary School Journal*, Vol. 100, No. 5, Special Issue: Non-Subject-Matter Outcomes of Schooling [II] (May, 2000), pp. 443-471
2. Valeski, T.N. and Stipek, D.J.. *Young Children's Feelings about School. Child Development*, Vol. 72, No. 4 (Jul. - Aug., 2001), pp. 1198-1213 Available at <http://www.jstor.org/stable/1132437>

## Adolescents' Perceived School Performance, By Federal Poverty Level, 2005

Source (VI): Survey of Adolescent Well-Being (SAWB)



## MISSING SCHOOL

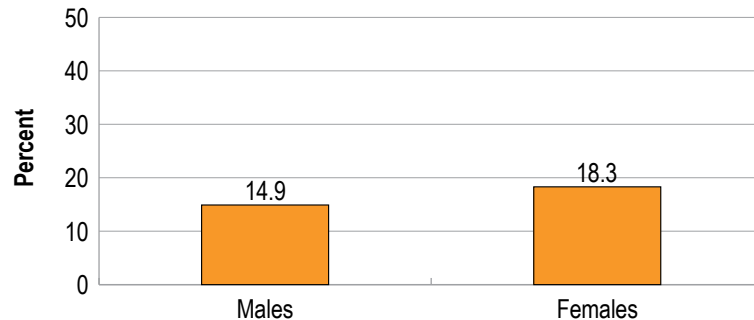
While truancy is sometimes seen as a symptom of problem behavior, adolescents may miss school for a variety of reasons. Survey of Adolescent Well-Being (SAWB) respondents indicated that school tardiness and truancy do not vary significantly by race/ethnicity or income.

In fact, according to 2005 SAWB respondents, 35 percent of adolescents in California have never been late or skipped school without their parents' permission.

Females (18.3 percent) reported cutting school more frequently than males (14.9 percent); however, these differences were not significant. Older age groups reported having cut school at a higher rate than younger ones. For adolescents aged 12 to 13, 4.6 percent reported having cut school. For adolescents aged 14 to 15, 13.5 percent reported that they had cut school. And for adolescents aged 16 to 17, 26.9 percent reported having cut school. More than one-third of adolescents (36.8 percent) who skipped school without permission had done so more than five times.

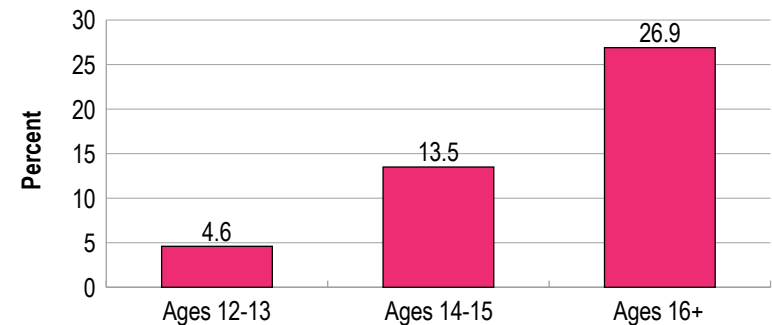
**Adolescents Who Ever Cut School, By Gender, 2005**

Source (VI): Survey of Adolescent Well-Being (SAWB)



**Adolescents Who Ever Cut School, By Age Group, 2005**

Source (VI): Survey of Adolescent Well-Being (SAWB)



## WALKING AND BIKING TO AND FROM SCHOOL

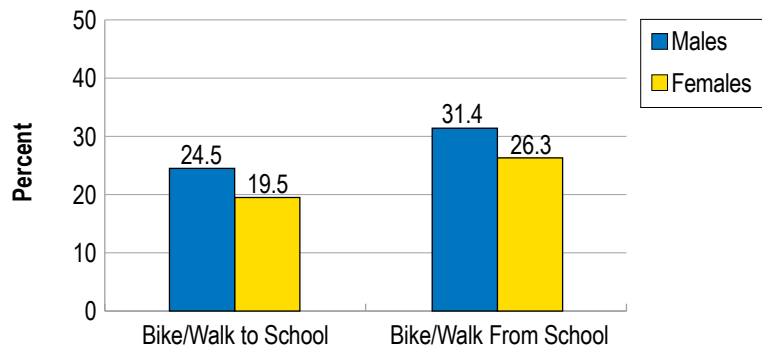
The 2005 U.S. Department of Agriculture (USDA) *Dietary Guidelines for Americans* recommend that adolescents get at least one hour of moderate or vigorous physical activity each day. Using walking and biking as means of transportation to and from school can help youth meet those recommended guidelines.<sup>1</sup>

Only 22.2 percent of California adolescents responding to the 2004 CalTEENS reported biking or walking to school on a daily basis, while 29.0 percent reported biking or walking home from school. Males reported walking or biking to or from school significantly more often than females.

<sup>1</sup> U.S. Department of Health and Human Services and U.S. Department of Agriculture. *Dietary Guidelines for Americans*, 2005. 6th Edition, Washington, DC: U.S. Government Printing Office, January 2005.

### School Transportation, By Gender, California Teens, 2004

Source (V): California Teen Eating, Exercise and Nutrition Survey (CalTEENS)



## NUTRITION EDUCATION IN SCHOOL

School-based nutrition programs with youth involvement show significant positive results among those involved in promotional activity.<sup>1</sup>

On the 2004 CalTEENS, just over half (60.8 percent) of California teens aged 12 to 17 reported that they had attended a class on healthy eating. Those students who attended a class on healthy eating also reported eating a whole serving more of fruits and

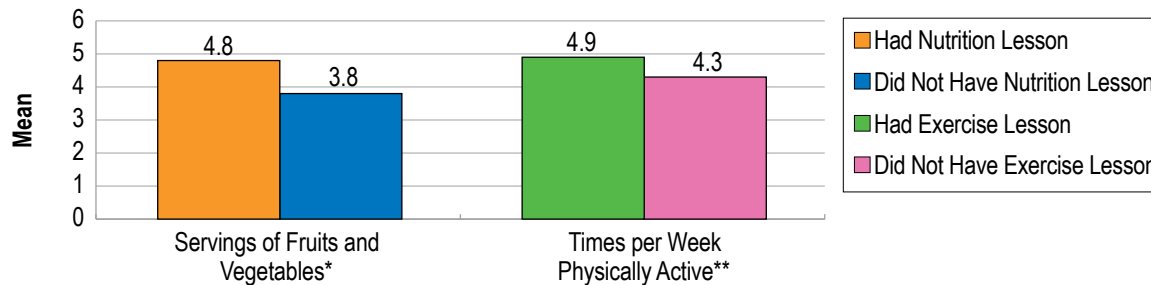
vegetables per day than those who did not attend such a class (4.8 servings compared to 3.8 servings).

In addition, teens who attended a class on the health benefits of physical activity reported being more active each week and for eight minutes more on a daily basis than those who did not.

1 Hamdan, S., Story, M., French, S.A., Fulkerson, J.A., and Nelson, H., *Perceptions of adolescents involved in promoting lower-fat foods in schools: Associations with level of involvement*, *Journal of American Dietetic Association*, 105, 2, February 2005, 191.

### Mean Fruit & Vegetable Consumption & Physical Activity Minutes, By Nutrition & Physical Activity Lessons, 2004

Source (V): California Teen Eating, Exercise and Nutrition Survey (CalTEENS)



\*2004 data; \*\*2002 data

### PHYSICAL FITNESS TESTING

In spring 2006, physical fitness testing was conducted in California public schools in grades five, seven, and nine.<sup>1</sup> The FITNESSGRAM,<sup>2</sup> developed by The Cooper Institute in Dallas, Texas, consists of three components: (1) aerobic capacity; (2) body composition; and (3) muscular strength, endurance, and flexibility. To complete the test, students were required to participate in six fitness areas, including curl-up and trunk lift tests and one test option under each of the following four areas: aerobic capacity, body composition, upper body strength and endurance, and flexibility. Performance levels for each of the tests were classified as either (a) *in the healthy fitness zone* (HFZ), a minimum level of fitness for that area, or (b) *needs improvement*. The goal was for students to achieve the HFZ for all six areas.<sup>3</sup>





Most of the students did not meet all six standards. In 2006, only 25.6 percent of fifth-graders, 29.6 percent of seventh-graders, and 27.4 percent of ninth-graders met the goal of six fitness standards.

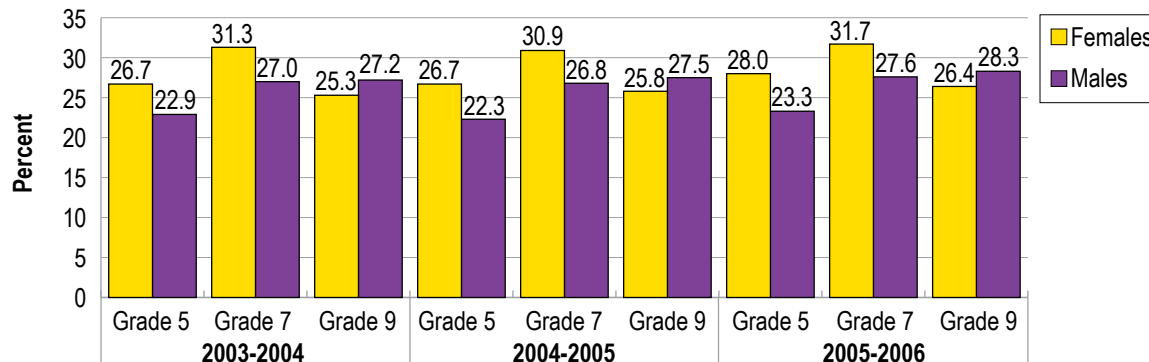
Three-year data (from 2004-2006) indicated that physical fitness levels were achieved differently by boys and girls, with girls having higher HFZ achievement levels than boys in grades five and

seven, but lower achievement levels in grade nine. The highest achievement levels for girls were in grades seven, but these tapered off in grade nine.

- 1 2006 California Physical Fitness Test: Report to the Governor and the Legislature, Sacramento, California: California Department of Education, December 2006. Available at <http://www.cde.ca.gov/ta/tg/pf/documents/rptgov2006.pdf>.
- 2 Welk, G. J., Meredith, M.D. (Eds.). (2008). *Fitnessgram / Activitygram Reference Guide*. Dallas, TX: The Cooper Institute.
- 3 California Department of Education, 2007. Available at <http://dq.cde.ca.gov/dataquest/PhysFitness/appendix1.htm>.

### California Students Achieving Healthy Fitness Zone (HFZ) in All Six Fitness Areas, By Gender & Grade, 2004-2006

Source (II): California Department of Education







## HEALTH STATUS

| [Health Indicators](#) | [Health Behaviors](#) | [Reproductive Health](#) |

### INTRODUCTION

Health and health-risk behaviors initiated during adolescence may establish life-long patterns of behaviors into adulthood. Unfortunately, adolescents' feelings of invulnerability and their focus on the present interferes with their ability to understand how the choices they make impact their future health status. Therefore, examining adolescent health status is an important step for health professionals, policymakers and evaluators in adolescent health promotion and risk prevention. Monitoring trends in health status helps to identify new issues as they emerge as well as changes in ongoing issues. The following section presents data regarding health indicators, health behaviors and reproductive health. Where available, the data are displayed by gender, age group, and race/ethnicity.

### PERCEIVED HEALTH STATUS

In public health and medicine, the concept of health-related quality of life refers to a person's perceived health over time. Tracking health-related quality of life in different populations can help identify groups that may need special interventions to improve their health.<sup>1</sup>

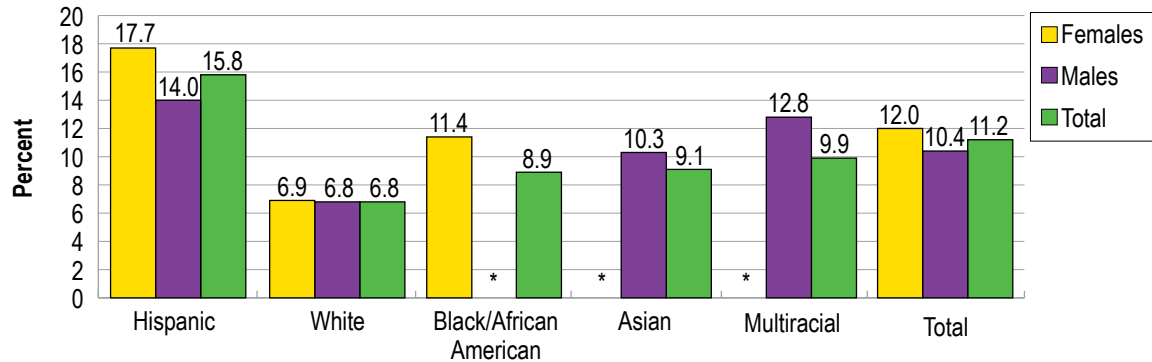
In 2003 and 2005 combined, California Health Interview Survey adolescent respondents were asked whether their health was excellent, very good, good, fair, or poor in general. Most of the respondents (88.8 percent) said that their health was excellent/very good or good. And about 11.2 percent said that their health was fair/poor. Rates for fair/poor health varied slightly among the respondents, with 12.0 percent of the females and 10.4 percent of the males reporting fair/poor health. Among the race/ethnicity groups, more Hispanics reported having fair/poor health (15.8 percent), and fewer

Whites reported having fair/poor health (6.8 percent). Hispanic females (17.7 percent), Hispanic males (14.0 percent), and Multiracial males (12.8 percent) reported feeling fair/poor.

1 Centers for Disease Control and Prevention (CDC), 2007. Available at <http://www.cdc.gov/hrqol/>.

### Health Status Fair/Poor, By Gender & Race/Ethnicity, 2003 & 2005

Source (III): California Health Interview Survey (AskCHIS)



\*Sample size too small – data are unreliable

### SCHOOL ATTENDANCE

Research suggests an association between recurrent physical health problems and school failure, most likely explained by absence from school.<sup>1</sup> About one-quarter of the 2005 California Health Interview Survey (CHIS) adolescent respondents who were attending school (25.6 percent) reported that they had missed school days in the previous month because of a health problem. Missing school days varied by race/ethnicity, with the Multiracial group reporting the highest rate of missing school days (31.3 percent), and Asians reporting the lowest rate of missing school days (14.3 percent).

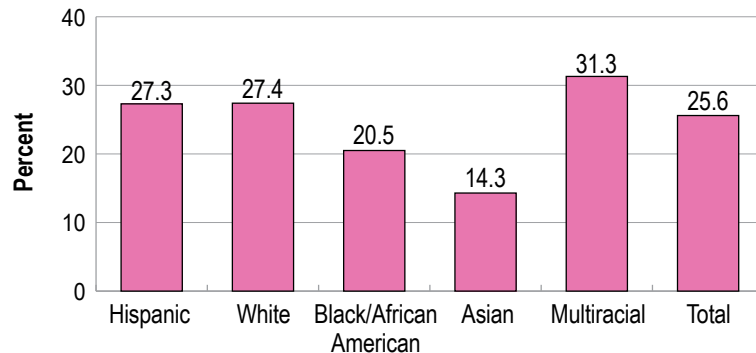
Having asthma provides an example of the association between school attendance and health. CHIS 2005 data found that, among students who currently had asthma, 32.4 percent reported missing school, while 24.6 percent of students without asthma reported missing school.

Absence from school was also related to dental health. In 2003, 8.1 percent of student respondents reported missing school during the previous 12 months due to dental problems (not routine check-ups). Rates varied slightly for males (8.5 percent) compared to females (7.8 percent).

<sup>1</sup> *Getting Results, Update 5: Student Health, Supportive Schools, and Academic Success, Sacramento, California: California Department of Education, 2005. Available at <http://www.gettingresults.org/c/@j041m.dXtRf7c/Pages/getfile.html?getfile@Update5chapter1.pdf>.*

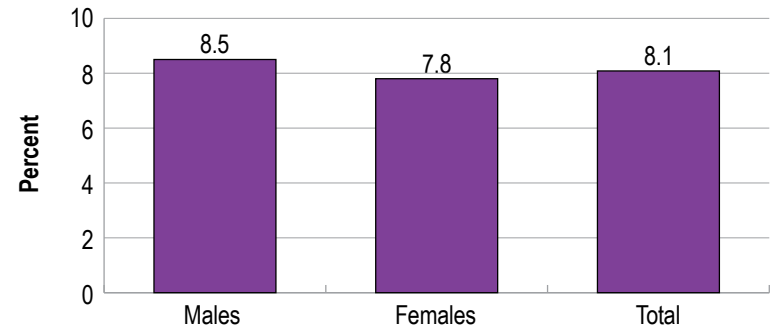
### Missing School Days Because of a Health Problem in the Previous Month, By Race/Ethnicity, 2005

Source (III): California Health Interview Survey (AskCHIS)



### Missed School Because of Dental Problem in the Previous 12 Months, By Gender, 2003

Source (III): California Health Interview Survey (AskCHIS)





## ASTHMA

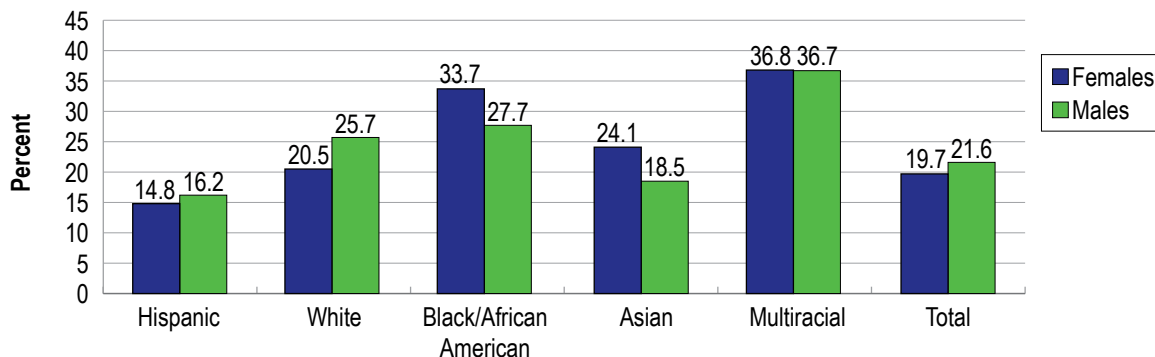
Asthma is a disease that affects the lungs, causing repeated episodes of wheezing, breathlessness, chest tightness, and nighttime coughing. Asthma can be controlled by taking medicine and avoiding the triggers that can cause an attack.<sup>1</sup> Even though asthma deaths are rare among children, 195 U.S. children aged 0-17 died from asthma in 2003. This

constituted 0.3 deaths per 100,000 children compared to 1.4 deaths per 100,000 adults.<sup>2</sup>

In 2005, 20.6 percent of California Health Interview Survey (CHIS) respondents reported ever being diagnosed with asthma. Males reported slightly higher rates (21.6 percent) than females (19.7 percent). Among the race/ethnicity groups, the Multiracial groups and Black/African American females reported

### Adolescents Ever Diagnosed with Asthma, By Gender & Race/Ethnicity, 2005

Source (IV): California Health Interview Survey (CHIS)



higher rates of being ever diagnosed with asthma. Among all CHIS 2005 respondents ever told that they had asthma, 23.8 percent reported that they had an asthma episode in the past 12 months (19.7 percent of males, and 28.4 percent of females), and 25.6 percent said that they were taking daily prescription medication to control asthma (22.9 percent of males and 28.7 percent of females). The rate of CHIS 2005 respondents with current asthma was 13.2 percent.

Among the race/ethnicity groups, the highest rates for current asthma were reported by Multiracial females (29.3 percent) and Multiracial males (24.5 percent) and Black/African American females (27.4 percent).

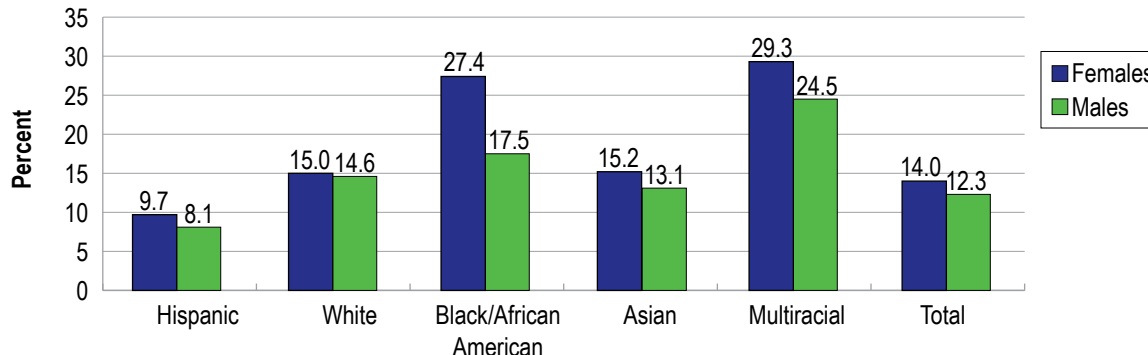
1 Centers for Disease Control and Prevention (CDC), 2007. Available at <http://www.cdc.gov/asthma>.

2 <http://www.cdc.gov/asthma/faqs.htm>.

3 <http://www.cdc.gov/nchs/products/pubs/pubd/hestats/ashtma03-05/asthma03-05.htm#fig7>

### Adolescents with Current Asthma, By Gender & Race/Ethnicity, 2005

Source (IV): California Health Interview Survey (CHIS)



## DIABETES

Diabetes includes a group of diseases indicated by high levels of blood glucose resulting from defects in insulin production, insulin action or both. Diabetes can lead to serious complications such as heart disease and stroke, blindness, kidney disease, and amputations if not managed properly. National estimates of diabetes suggest that about 176,500 people, or 0.22 percent of people aged 20 and younger had diabetes in 2005.<sup>1</sup> Since 1980 ongoing studies in the United States and other countries show increasing rates of diabetes in youth, concurrent with the increase in childhood obesity.<sup>2</sup>

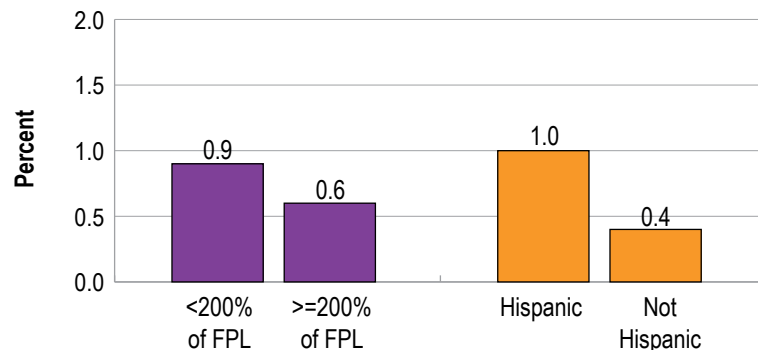
During 2003 and 2005, California Health Interview Survey adolescent respondents were asked whether a doctor ever told them or their parents that the respondents had diabetes or sugar diabetes. Less than one percent (0.7 percent) responded that they were diagnosed with diabetes. Due to the small sample size, group differences could not be identified statistically. Diabetes rates did not differ between males and females.

Youth from lower income families (<200 percent of the federal poverty level) reported higher diabetes diagnosis rates (0.9 percent), compared with youth from higher income levels (0.6 percent). Hispanic youth reported higher rates of diabetes diagnosis (1.0 percent), compared with non-Hispanics (0.4 percent).

- <sup>1</sup> *National Diabetes Education Program, Centers for Disease Control and Prevention (CDC), 2007. Available at [http://ndep.nih.gov/diabetes/pubs/2005\\_National\\_Diabetes\\_Fact\\_Sheet.pdf](http://ndep.nih.gov/diabetes/pubs/2005_National_Diabetes_Fact_Sheet.pdf).*
- <sup>2</sup> *Lipton, R.B., Incidence of Diabetes in Children and Youth –Tracking a Moving Target, Journal of the American Medical Association, 297, 24, June 2007, 2760–2762.*

### Diabetes Diagnosis, By Federal Poverty Level (FPL) & Hispanic Origin, 2003 & 2005

Source (III): California Health Interview Survey (AskCHIS)



## DISABILITY

The Americans with Disabilities Act defines an individual with a disability as someone who has “a physical or mental impairment that substantially limits one or more of their major life activities; a record of such an impairment; or being regarded as having such an impairment”.<sup>1</sup> The 2005 American Community Survey census indicated that 14.9 percent of the population aged five and older, not in institutions, reported having a disability.<sup>2</sup>

The California Department of Education reported that more than 680,000 students aged birth through 22 received special education services in 2004-2005. The top category of services was “Learning disabilities” (48.2 percent), followed by “Speech or Language Impairment” (25.8 percent) and “Mental Retardation” (6.5 percent). While the ratio of females to males receiving special education services was



one to two, males were five times more likely than females to be identified as autistic.<sup>3</sup>

During 2003, California Health Interview Survey respondents aged 12 to 17 were asked whether they needed special equipment or someone to help them with eating, dressing, bathing, getting out of chairs, moving around the house, or using the toilet because of a health problem or condition. Since only 0.5

percent reported in the affirmative, characteristics of these respondents could not be identified statistically.

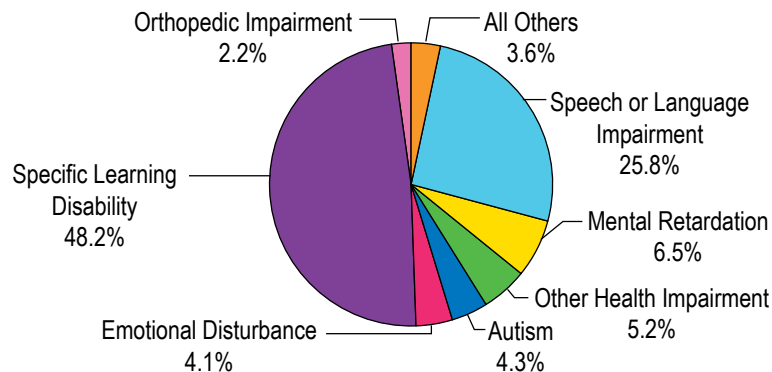
1 *The American With Disabilities Act*, U.S. Department of Labor, 2007. Available at <http://www.dol.gov/esa/regs/statutes/ofccp/ada.htm>.

2 U.S. Census Bureau, 2007. Available at [http://factfinder.census.gov/servlet/STTable?\\_bm=y&-geo\\_id=01000US&-qr\\_name=ACS\\_2005\\_EST\\_G00\\_S1801&-ds\\_name=ACS\\_2005\\_EST\\_G00\\_&-\\_lang=en&-caller=geoselect&-state=st&-format=](http://factfinder.census.gov/servlet/STTable?_bm=y&-geo_id=01000US&-qr_name=ACS_2005_EST_G00_S1801&-ds_name=ACS_2005_EST_G00_&-_lang=en&-caller=geoselect&-state=st&-format=).

3 California Department of Education, 2007. Available at <http://www.cde.ca.gov/sp/se/ds/documents/pcktbk0405.pdf>.

## School Enrollment K-12, Special Education Students By Category of Disability, 2004-2005

Source (II): California Department of Education

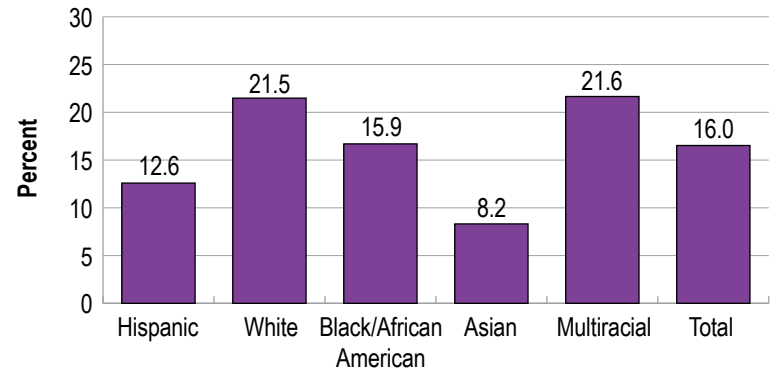


## INJURIES

Serious injury and violence pose major public health threats to the well-being of children and youth.<sup>1</sup> In 2005, teenage respondents to the California Health Interview Survey (CHIS) were asked whether they had been injured seriously enough to seek medical advice or treatment in the previous 12 months. A total of 16.0 percent responded that they had had

### Adolescents Seriously Injured in the Previous Year, By Race/Ethnicity, 2005

Source (III): California Health Interview Survey (AskCHIS)



serious injuries in the preceding 12 months. Rates of serious injury varied by race/ethnicity, with Multiracial (21.6 percent) and Whites (21.5 percent) having higher rates than Hispanics (12.6 percent), and Asians reporting even lower rates (8.2 percent).

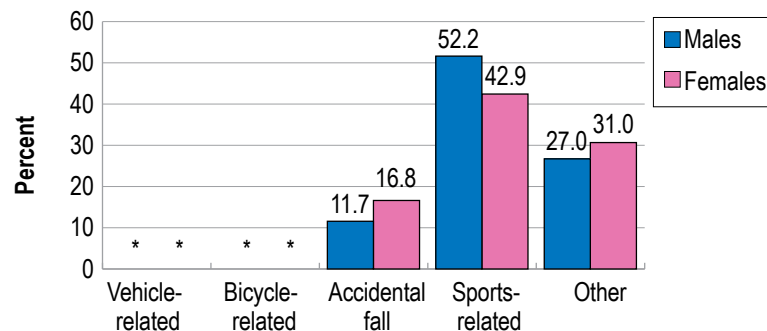
Among CHIS female respondents, 13.2 percent reported serious injuries, compared to 18.6 percent of CHIS male respondents. The highest proportion of injuries was sports-related (48.4 percent), with

males reporting a higher percentage of these types of injuries (52.2 percent) than females (42.9 percent).

<sup>1</sup> Centers for Disease Control and Prevention (CDC), 2007. Available at <http://www.cdc.gov/ncipc/factsheets/children.htm>.

## Types of Serious Injuries, By Gender, 2005

Source (III): California Health Interview Survey (AskCHIS)



\*Sample size too small – data are unreliable

NOTE: Each bar represents a percentage of the total injuries for that gender.



## LEADING CAUSES OF DEATH

In 2000-2004, the leading causes of death in order of rank for California adolescents aged 12 to 17 were: (1) accidents; (2) homicide; (3) cancer; (4) suicide; and (5) diseases of the nervous system. These leading causes accounted for about 81.5 percent of adolescent deaths during that period. Males had higher overall death rates (38.5 per 100,000 on a five-year average) than females (19.0 per 100,000 on a five-year average). The top specific causes of death included motor vehicles and other land transport accidents; assault by firearms; malignant cancers of lymphoid, haematopoietic and related tissue; intentional self-harm by hanging strangulation and suffocation; and cerebral palsy and other paralytic syndromes.

Among the race/ethnicity groups, Black/African Americans had a significantly higher death rate (45.3 per 100,000 on a five-year average), compared with the remaining groups.

### Leading Causes of Death Among California Adolescents Aged 12 to 17, 2000-2004<sup>1</sup>

Group Cause of Death	5 Year Avg.	
	N <sup>2</sup>	Rate <sup>3</sup>
Accidents (Unintentional Injuries)	348.6	11.0
Homicide	165.4	5.2
Malignant Neoplasms (Cancer)	104.2	3.3
Suicide	80.0	2.5
Diseases of the Nervous System	50.8	1.6
Diseases of the Circulatory System	40.2	1.3
Congenital Malformations	36.4	1.1
Diseases of the Respiratory System	22.2	0.7
Endocrine and Metabolic Diseases	22.2	0.7
Symptoms, Signs, and Abnormal Conditions	15.0	*
All Other Causes of Death	34.0	1.1
<b>Statewide Total</b>	<b>919.0</b>	<b>29.0</b>

NOTES: For ICD codes see Appendix A

2 Annual average numbers of deaths for the 2000-2004 time period.

3 Five-year average age-specific death rates per 100,000 population.

\*Rate statistically unreliable due to small number of events.

### Deaths & Death Rates Among Adolescents Aged 12 to 17, By Gender & Race/Ethnicity, 2000-2004<sup>1</sup>

	5-Year Avg.	
	N <sup>2</sup>	Rate <sup>3</sup>
<b>Statewide Total</b>	113.2	45.3
<b>Gender</b>		
Female	293.2	19.0
Male	625.8	38.5
<b>Race-Ethnicity</b>		
Black/African American	113.2	45.3
American Indian/Alaska Native	6.0	*
Asian	73.6	23.2
Hispanic/Latino	389.0	29.3
Pacific Islander	4.8	*
White	350.4	30.4
Multiracial	10.6	*

NOTES: Includes all causes of death, ICD-10 codes A00 - Y89.

For confidence intervals see Appendix A

2 Annual average rate per 100,000 population aged 12 - 17 years.

3 Five-year average age-specific death rates per 100,000 population.

\* Rate statistically unreliable due to small number of events.

<sup>1</sup> Center for Health Statistics, California Department of Public Health, Death Records, 2000-2004; Demographic Research Unit, California Department of Finance, Race/Ethnic Population With Age and Sex Detail, 2000-2050, May 2004.

## MENTAL HEALTH

Like adults, some adolescents may have mental health issues that interfere with social development, school progress and feelings of self-worth.

To measure depressive symptomology,<sup>1</sup> respondents to the 2005 Survey of Adolescent Well-Being were asked a series of questions about how often in the previous 12 months they felt overly tired, sad, hopeless, anxious, or worried, and whether they had had trouble sleeping. Respondents were also asked about risky behavior, family dynamics, lying, and seeking revenge.<sup>2</sup>

Among the respondents, depressive symptoms were more than twice as prevalent in females (11.7 percent ) as in males,(4.5 percent), but rebelliousness was higher among males (29.0 percent) compared to females (21.2 percent). Depression may have some roots in gendered roles

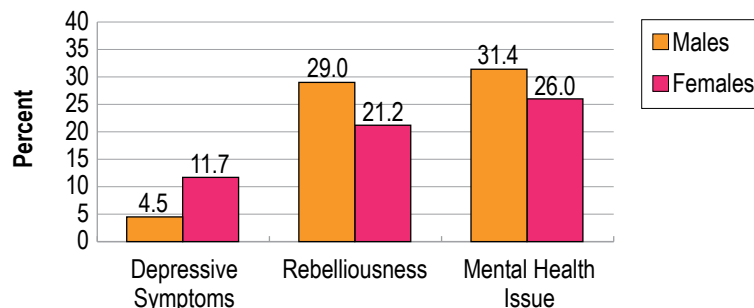
for females. Psychological research has shown that factors such as negative body image, lower physical activity, and feeling more stress in peer and familial relationships may disproportionately affect females.<sup>3</sup>

Correspondingly, it has also been suggested that rebelliousness in males may be masked depression.<sup>4</sup> Males are more likely to engage in negative social conduct, sometimes labeled as “problem behavior,” such as lying to protect friends, arguing with family, and engaging in dangerous or risky activities. When depression and rebelliousness were combined into one variable, males had a higher prevalence of reporting some sort of mental health issue (31.4 percent) than females (26.0 percent).

- 1 Scoring was based upon cumulative score, depending on reported frequency of problem.
- 2 Scoring was based upon cumulative score, depending on positive responses to questions.
- 3 Gianconia, R.M., Reinherz, H.Z., Paradis, A.D., Carmola-Hauf, A.M., and Stashwick, C.K., Major depression and drug disorders in adolescence: General and specific impairments in early adulthood, *Journal of the American Academy of Child and Adolescent Psychiatry*, 40, No.12, 2001, 1426-1433.
- 4 Breland, D.J., and Park, M.J., Depression: Focus on the adolescent male. *American Journal of Men's Health*, 2, 2008, 87-93.

## California Adolescents Reporting Depressive Symptoms, Rebelliousness, or Either, By Gender, 2005

Source (VI): Survey of Adolescent Well-Being (SAWB)



## FRUIT AND VEGETABLE CONSUMPTION

The most recent Dietary Guidelines for Americans from the U.S. Department of Agriculture (USDA) recommend that all people over the age of two years choose and maintain a healthy diet which includes more vegetables, fruits, grains (especially whole grains), fat-free or low-fat milk products, and fish, lean meat, poultry, or beans.<sup>1</sup> Eating a wide variety of fruits and vegetables can provide many vitamins and minerals, fiber and phytochemicals required by the body for maintaining good health and reducing the risk of cancer and chronic disease.<sup>2</sup> Simple changes such as eating at least the minimum number of recommended daily servings of fruits and vegetables are important for good health and preventing many chronic diseases.<sup>1</sup> The 2005 USDA dietary guidelines for youth, which are based on age, gender and activity level, range in amounts from 3.5 to 6.5 cups each day.<sup>1</sup>

According to 2004 CalTEENS data, reported consumption of fruits and vegetables among teens did not change significantly from 1998 to 2004, increasing only from 4.3 to 4.4 servings per day. There was no significant difference between ethnic groups or teens with income-related food risk (IRFR)<sup>3</sup> for fruit and vegetable consumption in 2004. Of the 4.4 total servings of fruits and vegetables consumed by California teens, only 1.2 servings were from vegetables or salads (one-third or less than the minimum five servings per day for females and seven servings for males in this age group).

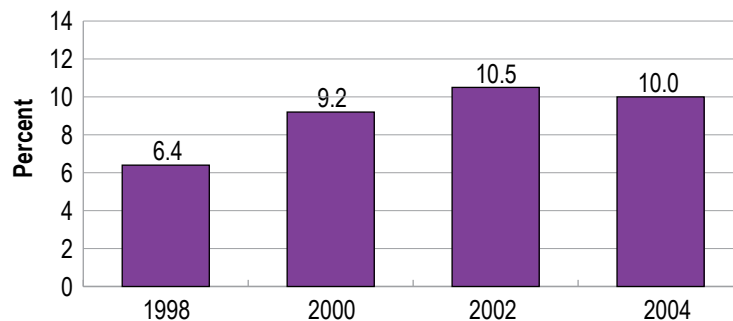
While there was little change in overall fruit and vegetable consumption, the prevalence of teens eating no fruits and vegetables increased significantly, from 6.4 in 1998 to 10.0 percent in 2004. Also in 2004, overweight or at risk for overweight<sup>4</sup> teens reported eating no fruits and vegetables significantly more often than teens of normal weight (13.7 percent and 8.8 percent, respectively). Teens

experiencing IRFR were much more likely to eat no fruits and vegetables compared to teens without income-related food risk (14.4 percent and 8.8 percent, respectively).

According to 1998 and 2004 CalTEENS data, the percent of teens meeting the recommended minimum amount of fruits and vegetables (five servings for females, seven for males) increased marginally from 30.2 percent in 1998 to 33.2 in 2004. Reported

### **Trends for Consuming No Fruits and Vegetables, California Teens, 1998-2004**

Source (V): California Teen Eating, Exercise and Nutrition Survey (CalTEENS)



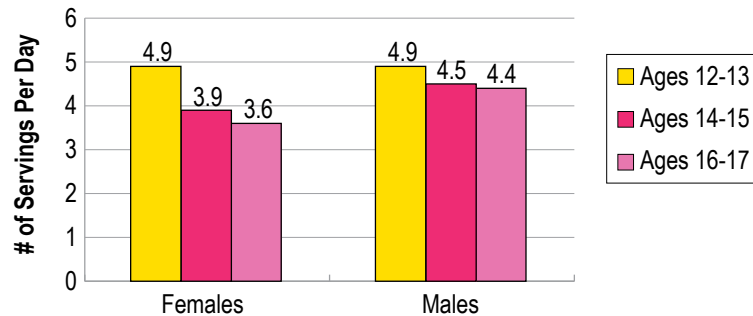


consumption of fruits and vegetables by males and females in their early teens (ages 12-13) in 2004 showed similar rates (both reporting 4.9 servings of fruits and vegetables, salads and juices). However, with age, consumption by females decreased much more sharply than that of males. Servings declined to 3.6 for females aged 16 to 17; servings dropped to 4.4 for males. Differences in consumption were seen mainly in fruit and juices (3.3 servings for males and 2.4 servings for females aged 16 to 17).

- 1 U.S. Department of Health and Human Services and U.S. Department of Agriculture, *Dietary Guidelines for Americans, 2005, 6th Edition*, Washington, D.C.: U.S. Government Printing Office, January 2005, pp. 1-84.
- 2 Block, G., Patterson, B. and Subar, A., Fruit, vegetables, and cancer prevention: A review of the epidemiological evidence, *Nutrition Cancer*, 18, No. 1, 1992, 1-29.
- 3 Income-related food risk (IRFR) included teens who reported being hungry in the past 12 months or lived in households that received food stamps or WIC food assistance.
- 4 Body Mass Index (BMI) was calculated using the equation: weight (kg) / height (m<sup>2</sup>). At risk for overweight = BMI > 85th < 95th percentile. Overweight = BMI > 95th percentile.

### Fruit & Vegetable Servings, By Gender & Age Group, California Teens, 2004

Source (V): California Teen Eating, Exercise and Nutrition Survey (CalTEENS)



NOTE: The minimum recommendation in 2004 was five servings for females and seven for males.





### SODA AND SWEETENED BEVERAGE CONSUMPTION

The most recent Dietary Guidelines for Americans from the U.S. Department of Agriculture emphasize choosing foods that are low in saturated fat and added sugars.<sup>1</sup> Intake of empty calorie beverages such as sodas and other sweetened drinks can replace consumption of important nutrients such as calcium from low-fat milk or fortified soy beverages in youth diets. A meta-analysis of current research showed some evidence that soda consumption is linked to an increase in body mass and energy intake.<sup>1</sup>

Data from the 2004 CalTEENS showed clear differences in soda and sweetened beverage intake among specific subgroups of teens. Almost one-third (30.7 percent) of California adolescents drank two or more sodas or sweetened beverages each day. Of this group, males, smokers and youth

who were overweight or at risk for overweight<sup>2</sup> were more likely to be heavy soda or sweetened beverages consumers, reporting consumption of two or more on a daily basis.

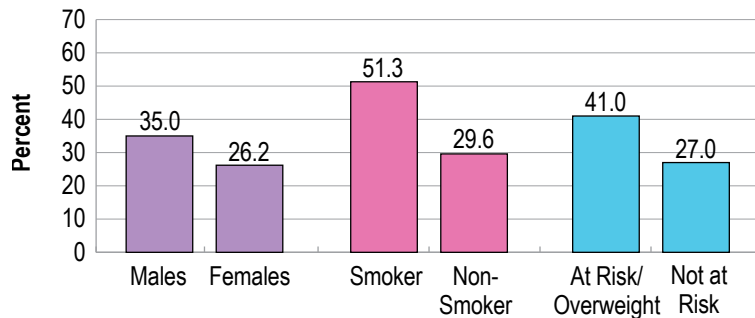
Average soda or sweetened beverage consumption among California teens in 2004 was reported as 1.2 drinks on the previous day. Youth who were overweight or at risk for being overweight reported significantly higher consumption of soda or

sweetened beverages compared to youth who were not overweight or at risk for being overweight (1.5 vs. 1.1 sodas).

- 1 Vartanian, L.R., Schwartz, M.B. and Brownell, K.D., *Effects of soft drink consumption on nutrition and health: A systematic review and meta-analysis*, *American Journal of Public Health*, 97, No. 4, 2007, 667-675.
- 2 *Body Mass Index (BMI)* was calculated using the equation: weight (kg) / height (m<sup>2</sup>). At risk for overweight = BMI > 85th < 95th percentile. Overweight = BMI > 95th percentile.

### Drinking 2 or More Servings of Soda Per Day, By Gender, Smoking & Weight Status, California Teens, 2004

Source (V): California Teen Eating, Exercise and Nutrition Survey (CalTEENS)



## FAST FOOD CONSUMPTION

Much fast food is comprised of high-fat, high-calorie items that can provide large amounts of calories and sugar to youth diets, contributing to overeating and higher body weight. Research has shown that eating out more frequently is associated with obesity, higher body fat and higher body mass index (BMI).<sup>1,2,3</sup> Additionally, consumption of fast-food meals is linked to eating more calories, more saturated fat, fewer fruits and vegetables, and less milk.<sup>1,4,5,6</sup> Family dinners at home are associated with healthy personal and social values.<sup>7</sup> Youth who eat more family meals have higher intake of fruits, vegetables, grains, calcium-rich foods, and other key nutrients.<sup>8</sup>

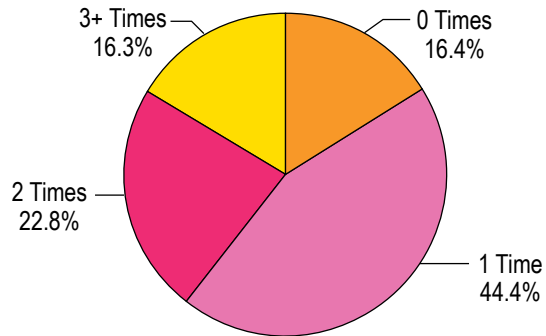
According to 2004 CalTEENS data, one-quarter (25.6 percent) of California teens aged 12-17 reported eating fast food on the previous day; 83.5 percent reported eating it at least one time during a typical week; and 16.3 percent ate fast food three



or more times in a usual week. More Hispanic teens reported eating fast food at least once during a typical week than any other ethnic group (92.8 percent Hispanic, 80.0 percent Black/African American, 78.4 percent Asian/Other, and 76.5 percent White). Youth experiencing income-related food risk (IRFR)<sup>9</sup> were significantly more likely to report eating fast food three or more times in a typical week than those not experiencing risk (19.7 percent vs. 14.7 percent).

### Fast Food Consumption Over a Typical Week, California Teens, 2004

Source (V): California Teen Eating, Exercise and Nutrition Survey (CalTEENS)



NOTE: Due to rounding, numbers do not add up to 100

- 1 E.M. Taveras, C.S. Berkey, S.L. Rifas-Shiman, D.S. Ludwig, H.R. Rockett, A.E. Field, G.A. Colditz, and M.W. Gillman, "Association of consumption of fried food away from home with body mass index and diet quality in older children and adolescents," *Pediatrics*, 116, 4, October 2005, 518-524;
- 2 M.A. McCrory, P.J. Fuss, N.P. Hays, A.G. Vinken, A.S. Greenberg, and S.B. Roberts, "Overeating in America: Association between restaurant food consumption and body fatness in healthy adult men and women ages 19 to 80," *Obesity Research*, 6, November 1999, 564-571;
- 3 R.W. Jeffery and S.A. French, "Epidemic obesity in the United States: are fast foods and television viewing contributing?" *American Journal of Public Health*, 2, February 1998, 277-280.
- 4 M. Schmidt, S.G. Affenito, R. Striegel-Moore, P.R. Khoury, B. Barton, P. Crawford, S. Kronsberg, G. Schreiber, E. Obarzanek, and S. Daniels, "Fast-food intake and diet quality in black and white girls," *Archives of Pediatrics and Adolescent Medicine* 159, 2004, 626-631;
- 5 S.A. Bowman and B.T. Vinyard, "Fast-food consumers vs. non-fast-food consumers: a comparison of their energy intakes, diet quality, and overweight status," *Journal of the American College of Nutrition*, 23, No. 2, 2004, 163-168;
- 6 S. Paeratakul, D.P. Ferdinand, C.M. Champagne, D.H. Ryan, and G.A. Bray, "Fast-food consumption among U.S. adults and children: dietary and nutrient intake profile," *Journal of the American Dietetic Association*, 103, 2003, 1332-1338.
- 7 J.A. Fulkerson, M. Story, A. Mellin, N. Leffert, D. Neumark-Sztainer, and S.A. French, "Family dinner meal frequency and adolescent development: relationships with developmental assets and high-risk behaviors," *Journal of Adolescent Health*, 39, 3, September 2006, 337-345;
- 8 D. Neumark-Sztainer, P.J. Hannan, M. Story, J. Croll, and C. Perry, "Family meal patterns: associations with sociodemographic characteristics and improved dietary intake among adolescents," *Journal of the American Dietetic Association*, 103, 3, March 2003, 317-322.
- 9 Income-related food risk (IRFR) included teens who reported being hungry in the past 12 months or lived in households that received food stamps or WIC food assistance.

### LOW-NUTRIENT FOOD CONSUMPTION

Consumption of high-calorie, low-nutrient foods such as pastries, donuts, pop-tarts, chips, cheese puffs, cake, pie, cookies, candy bars, sodas, sweetened beverages as well as fried foods such as chicken nuggets, fried chicken, egg rolls, or onion rings could replace nutrient-dense, healthy foods in youth diets at a time when critical growth and development take place. Consumption of these types of foods can compromise nutrition and health status. Studies show that a healthy breakfast and healthy diet have a positive effect on school performance and memory.<sup>1-2</sup>

On the 2004 CalTEENS, two out of three teens (65.1 percent) reported eating two or more servings of high-calorie/low-nutrient foods on a daily basis. Males were more likely to report eating two or more servings (68.1 percent) compared to females (62.0 percent). Youth experiencing income-related food risk<sup>3</sup> were more likely to report eating two or



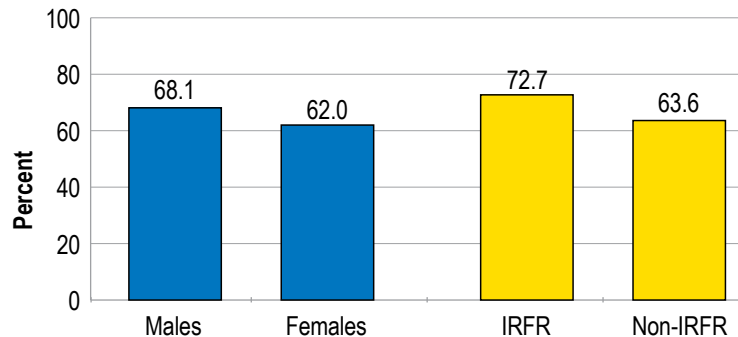
more servings (72.7 percent vs. 63.6 percent not experiencing income-related food risk). Nearly two-thirds (62.3 percent) of adolescents reported having soda on the previous day. More than one-third reported consumption of chips or fried snacks (39.0 percent) and bakery desserts (37.8 percent) and 30.6 percent reported eating candy on the previous day. Close to one-fourth (24.2 percent) reported intake of breakfast pastries and 18.3 percent of adolescents reported having french fries on the previous day.

Males reported eating french fries more often than females (20.8 percent and 15.7 percent, respectively) on the previous day.

- 1 Rampersaud, G.C., Pereira, M.A., Girard, B.L., Adams, J., and Metz, J.D., Breakfast habits, nutritional status, body weight, and academic performance in children and adolescents, *Journal of the American Dietetic Association*, 105, No.5, 2005, 743-760.
- 2 Taras, H., Nutrition and student performance at school, *Journal of School Health*, 75, No. 6, 2005, 199-213.
- 3 Income-related food risk (IRFR) included teens who reported being hungry in the past 12 months or lived in households that received food stamps or WIC food assistance.

### Eating 2 or More Servings of High Calorie/Low Nutrient Foods, By Gender & IRFR, California Teens, 2004

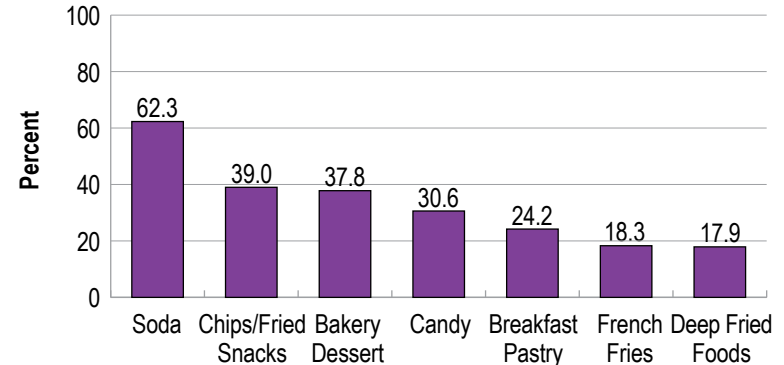
Source (V): California Teen Eating, Exercise and Nutrition Survey (CalTEENS)



NOTE: IRFR = Income Related Food Risk

### Consumption of High Calorie/Low Nutrient Foods, California Teens, 2004

Source (V): California Teen Eating, Exercise and Nutrition Survey (CalTEENS)





### PHYSICAL ACTIVITY

The 2005 Dietary Guidelines for Americans from the U.S. Department of Agriculture recommend at least one hour of moderate or vigorous daily physical activity for youth, in addition to dietary recommendations.<sup>1</sup> The Guidelines also suggest that children limit physically inactive pastimes such as watching television and video games.<sup>1</sup> A healthy diet and regular physical activity are both important for maintaining a healthy weight, another key dietary guideline. Also, physical activity is associated with lowered risk of heart disease, diabetes, colon cancer, and high blood pressure, and it improves psychological well-being and is positively associated with academic performance.<sup>2</sup>

In 2004, only 40.3 percent of teens responding to CalTEENS reported being physically active for an hour or more on the previous day – not a significant change since the 1998 CalTEENS data. However,



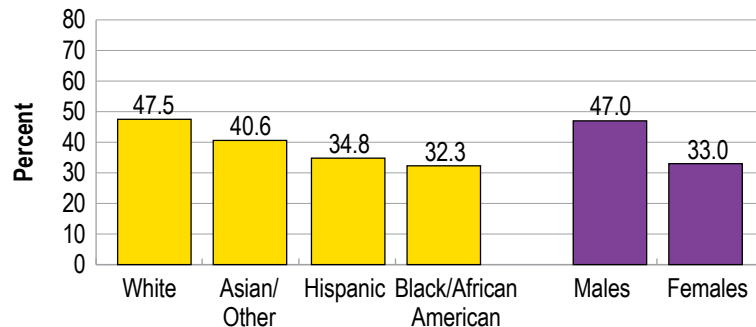


the percentage of Black/African American teens active for one or more hours on the previous day decreased from 44.1 percent in 1998 to 32.3 percent in 2004. Teens at income-related food risk (IRFR)<sup>3</sup> were least likely than other teens to get an hour of physical activity (44.9 percent and 29.3 percent). Lastly, there was a statistically significant decrease in participation in school physical education for teens in the oldest age group, those aged 16 to 17.

The FITNESSGRAM<sup>4</sup>, an assessment measuring three components of health-related physical fitness (aerobic capacity; body composition; and muscular strength, endurance and flexibility) is collected at all California public schools in grades 5, 7 and 9. The 2005-2006 FITNESSGRAM reports that only 29.6 percent of seventh-graders and 27.4 percent of ninth-graders achieved six of six fitness standards tested<sup>5</sup>. Hispanic teens scored the lowest, with about one in five (22.9 percent) of seventh-graders and

#### Meeting Physical Activity Recommendation, By Race/Ethnicity & Gender, California Teens, 2004

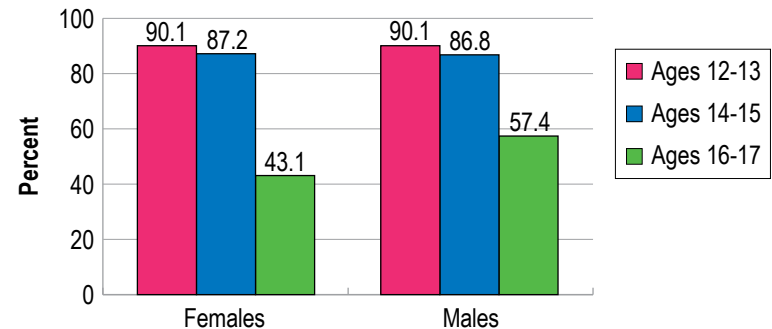
Source (V): California Teen Eating, Exercise and Nutrition Survey (CalTEENS)



NOTE: The minimum recommendation for physical activity is at least one hour of moderate or vigorous daily physical activity.

#### Enrolled in Physical Education Class, By Gender & Age Group, California Teens, 2004

Source (V): California Teen Eating, Exercise and Nutrition Survey (CalTEENS)



21.1 percent of ninth-graders achieving the fitness standards. In comparison to more than one in three (38.2 percent) of Whites in grade 7 and 34.7 percent in grade 9 achieved all six fitness standards.<sup>6</sup>

The most frequently reported activities by both males and females on the 2004 CalTEENS were running/jogging and basketball. Other frequently reported activities for both males and females included walking, softball/baseball, swimming, and soccer. Unique activities that were frequently reported for males were weight lifting, bicycling, and football. The most common activities specific to females were calisthenics/aerobics, dancing, and volleyball.

- 1 U.S. Department of Health and Human Services, *Healthy People 2010: Understanding and Improving Health*, 2nd ed., Washington, D.C.: U.S. Government Printing Office, November 2000, pp. 1-76.
- 2 Strong, W.B., Malina, R.M., Blimkie, C.J.R., Daniels, S.R., Dishman, R.K., Gutin, B., Hergenroeder, A.C., Must, A., Nixon, P.A., Pivarnik, J.M., Rowland, T., Trost, S., and Trudeau, F., *Evidence Based Physical Activity for School-Age Youth*, *Journal of Pediatrics*, 146, 2005, 732-737.
- 3 *Income-related food risk (IRFR) included teens who reported being hungry in the past 12 months or lived in households that received food stamps or WIC food assistance.*
- 4 Welk, G. J., Meredith, M.D. (Eds.). (2008). *Fitnessgram / Activitygram Reference Guide*. Dallas, TX: The Cooper Institute.
- 5 California Department of Education Physical Fitness Test Healthy Fitness Zones (FITNESSGRAM®). Available at <http://www.cde.ca.gov/ta/tg/pf/documents/fitnessgram.pdf>. Accessed August 19, 2008.
- 6 California Department of Education. California Physical Fitness Test Results (FITNESSGRAM®). Available at [http://dq.cde.ca.gov/dataquest/PhysFitness/PFTTest\\_St\\_2006.asp?cYear=2005-06&cChoice=PFTTest1&RptNumber=0](http://dq.cde.ca.gov/dataquest/PhysFitness/PFTTest_St_2006.asp?cYear=2005-06&cChoice=PFTTest1&RptNumber=0). Accessed August 19, 2008.

## SEDENTARY TIME

Time spent by teens engaging in sedentary activities such as watching TV or playing video games can displace time for sports or other physical activities that contribute to a healthy weight and lifestyle.

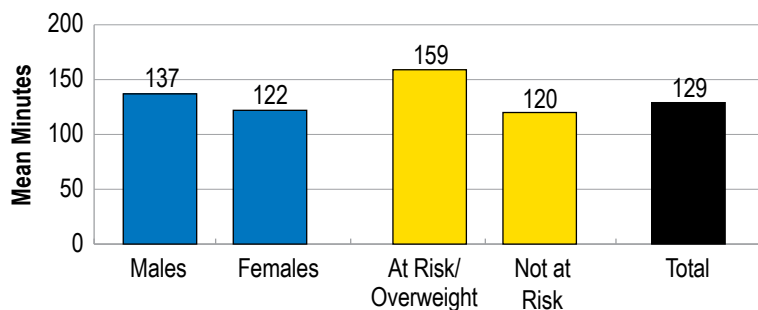
In 2004, California teens who responded to CalTEENS reported spending on average 129 minutes watching TV or playing video games for fun on a daily basis. Males reported 137 mean minutes compared to females at 122 minutes. Other groups who reported significantly higher averages for TV watching or playing video games were those not getting regular physical activity (142 mean minutes vs. 125 mean minutes for those that did get regular physical activity), those experiencing income-related food risk<sup>1</sup> (159 mean minutes vs. 119 mean minutes for those not at risk), and youth who were overweight or at risk for being overweight<sup>2</sup> (159 mean minutes vs. 120 mean minutes for those not at risk).

Six out of ten adolescents (60.2 percent) reported having a television in their bedroom.<sup>3</sup> Black/African Americans reported the highest prevalence of having a television in their room (74.8 percent) while Asian/Others reported the lowest (49.0 percent). Teens at income-related food risk reported a higher prevalence of having a television in their room compared to teens who were not at risk (69.0 percent compared to 56.7 percent). Having a TV in one's bedroom is associated with being overweight in youth.<sup>4</sup>

- 1 *Income-related food risk included teens who reported being hungry in the past 12 months or living in households that received food stamps or WIC food assistance.*
- 2 *Body Mass Index (BMI) was calculated using the equation: weight (kg) / height (m<sup>2</sup>). At risk for overweight = BMI > 85th < 95th percentile. Overweight = BMI > 95th percentile.*
- 3 *The question was read as: "Do you have a television set in your bedroom?" (If the respondent said that he or she did not sleep in a bedroom, an additional question was asked: "Is there a television in the room where you sleep?")*
- 4 *Adachi-Mejia, A.M., Longacre, M.R., Gibson, J.J., Beach, M.L., Titus-Ernstoff, L.T., and Dalton, M.A., Children with a TV in their bedroom at higher risk for being overweight, International Journal of Obesity (London), 4, April 31, 2007, 644-651.*

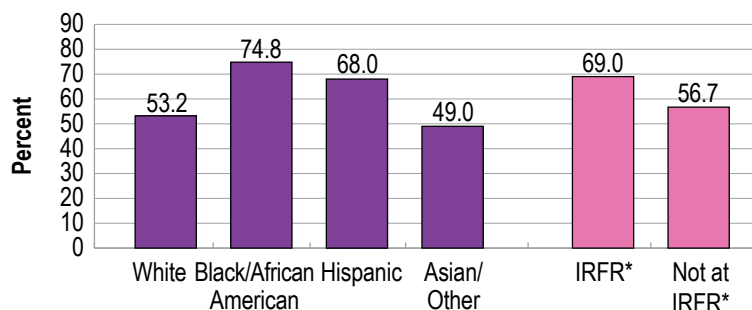
## Time with Television & Video Games, By Gender & Weight Status, California Teens, 2004

Source (V): California Teen Eating, Exercise and Nutrition Survey (CalTEENS)



## Reported Having a Television in Their Bedroom, By Race/Ethnicity & IRFR\*, California Teens, 2004

Source (V): California Teen Eating, Exercise and Nutrition Survey (CalTEENS)



\*IRFR = Income Related Food Risk

## WEIGHT (BMI) STATUS

Strong correlations exist between overweight status during youth and adulthood, with adult obesity associated with several chronic diseases such as diabetes, heart disease, hypertension, and some cancers.<sup>1</sup> Additionally, youth who become overweight or obese often suffer psychosocial problems such as low-self esteem, poor body image, and symptoms of depression. Among females who are identified as obese, poor self-image can extend into adulthood, resulting in fewer years of education completed, lower family incomes, and higher rates of poverty, regardless of earlier socioeconomic history.<sup>1</sup>

In 2001, the Surgeon General's report stated that overweight<sup>2</sup> children were at greater risk for other health problems, including type 2 diabetes, high blood pressure, high blood lipids, asthma, sleep apnea, early maturation, and orthopedic problems.<sup>1</sup> It is of great concern that several chronic diseases which have

been considered “adult onset” are now appearing at younger ages, including type 2 diabetes, elevated blood pressure, and hyperlipidemia.<sup>3</sup> Overweight has risen more dramatically nationally and in California for low-income youth and for those of certain ethnic groups.<sup>4</sup>

According to 2004 CalTEENS data, 28.6 percent of teens were at risk for or overweight,<sup>2</sup> a significant increase of 7.3 percentage points compared to the 21.3 percent reported by the survey in 1998. In 2004, 37.1 and 33.6 percent of Hispanic and Black/African American teens were overweight or at risk for being overweight, compared to 17.6 percent of White teens. The prevalence of overweight and at risk for overweight among Asian/Other teens increased significantly from 19.7 percent in 1998 to 33.8 percent in 2004, the largest increase among all ethnic groups. Teens at income-related food risk<sup>5</sup> were more likely to report being overweight or at risk for being overweight, compared to teens who were

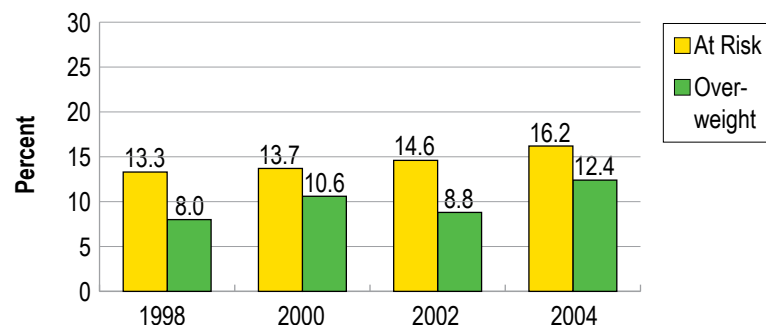
not at risk (35.4 percent and 27.0 percent). Trends from 1998 to 2004 show that body mass index (BMI) has increased over time for males and females, yet males were significantly more likely to be overweight or at risk for being overweight in each year.

FITNESSGRAM<sup>6</sup>, collects data on body composition using either BMI or skinfold measures to designate students meeting the healthy fitness zone in all California public schools for grades 5, 7 and 9. The

2005-2006 FITNESSGRAM, reported 33.0 percent of seventh-graders and 32.0 percent of ninth-graders scored below the healthy fitness zone for body composition<sup>7</sup>. Black/African Americans and Hispanics had the highest percentage of teens not in the healthy fitness zone for body composition (Hispanics with 40.4 percent among seventh-graders and 39.1 percent of ninth-graders; Black/African American teens with 35.1 percent of seventh-graders and 35.5 percent of ninth-graders)<sup>8</sup>.

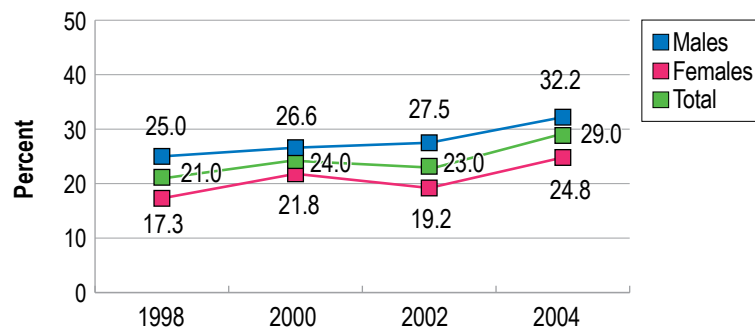
## Trends for At Risk & Overweight, California Teens, 1998-2004

Source (V): California Teen Eating, Exercise and Nutrition Survey (CalTEENS)



## Trends for At Risk & Overweight, By Gender, California Teens, 1998-2004

Source (V): California Teen Eating, Exercise and Nutrition Survey (CalTEENS)



- 1 *The Surgeon General's Call to Action To Prevent and Decrease Overweight and Obesity*, Washington, D.C.: United States Department of Health and Human Services, 2001. Available at <http://www.surgeongeneral.gov/topics/obesity/>.
- 2 Body Mass Index (BMI) was calculated using the equation: weight (kg) / height (m<sup>2</sup>). At risk for overweight = BMI > 85th < 95th percentile. Overweight = BMI > 95th percentile.
- 3 Quattrin, T., Liu, E., Shaw, N., Shine, B., and Chiang, E., Obese children who are referred to the pediatric endocrinologist: Characteristics and outcome, *Pediatrics*, 115(2), Feb 2005, 348-51.
- 4 Rodriguez, M.A., Kane, M., Alonzo-Diaz, L., and Flores, G.R., One out of Three Latino Adolescents Overweight or At Risk, *Health Policy Fact Sheet*, UCLA Center for Health Policy Research and Latino Coalition for a Healthy California, April 2005.
- 5 Income-related food risk included teens who reported being hungry in the past 12 months or lived in households that received food stamps or WIC food assistance.
- 6 Welk, G. J. and Meredith, M.D. (Eds.). (2008). *Fitnessgram / Activitygram Reference Guide*. Dallas, TX: The Cooper Institute.
- 7 California Department of Education Physical Fitness Test Healthy Fitness Zones (FITNESSGRAM®). Available at <http://www.cde.ca.gov/ta/tg/pf/documents/fitnessgram.pdf>. Accessed August 19, 2008.
- 8 California Department of Education. *California Physical Fitness Test Results (FITNESSGRAM®)*. Available at [http://dq.cde.ca.gov/dataquest/PhysFitness/PFTest\\_St\\_2006.asp?cYear=2005-06&cChoice=PFTest1&RptNumber=0](http://dq.cde.ca.gov/dataquest/PhysFitness/PFTest_St_2006.asp?cYear=2005-06&cChoice=PFTest1&RptNumber=0). Accessed August 19, 2008.



### DIETING BEHAVIORS AND BODY IMAGE

Weight control behaviors can have a significant influence on dietary intake, resulting in inadequate consumption of critical nutrients needed during growth periods in adolescence. Associations are specifically evident between unhealthy *dieting behaviors* and dietary intake among females compared to males.<sup>1</sup>

In 2004, more than one-third (38.0 percent) of CalTEENS respondents reported they were currently trying to lose weight. Of those, 18.8 percent reported dieting and 81.2 percent reported exercising or working out as the most common way they were trying to lose weight. Females reported dieting more frequently than males (22.9 percent vs. 13.6 percent), and males reported exercising or working out to lose weight more often than females (86.4 percent vs. 77.1 percent). Older female teens dieted

more than younger teens (31.8 percent vs. 15.1 percent), but exercised less (68.2 percent vs. 84.9 percent). There were no significant age-related differences for males. Interestingly, overweight and at risk for overweight youth reported dieting less often than other teens (15.6 percent vs. 24.1 percent), but exercising or working out to lose weight more often (84.4 percent vs. 75.9 percent) than other youth.

The most commonly reported forms of dieting included eating less food or fewer calories (49.1 percent), eating foods low in fat (23.0 percent), and eating foods low in sugar or carbohydrates (22.9 percent). Less healthy forms of dieting were reported at 5 percent or less, and included popular diets, eating more protein, or skipping meals.

Influenced by self-esteem, self-evaluation and other social factors, *body image* can impact dietary intake and psychological well-being. In 2004, CalTEENS

respondents reported feeling that their ideal weight would be an average of nearly seven pounds less than their current weight. Males reported ideal weight as 5.5 pounds less than current weight and females reported 8.3 pounds less. For those whose body mass index (BMI) indicated they were overweight or at risk for being overweight,<sup>2</sup> considerable differences in reported ideal weight and actual weight were evident: +23.1 pounds less than their actual weight compared to those not at risk for being overweight,

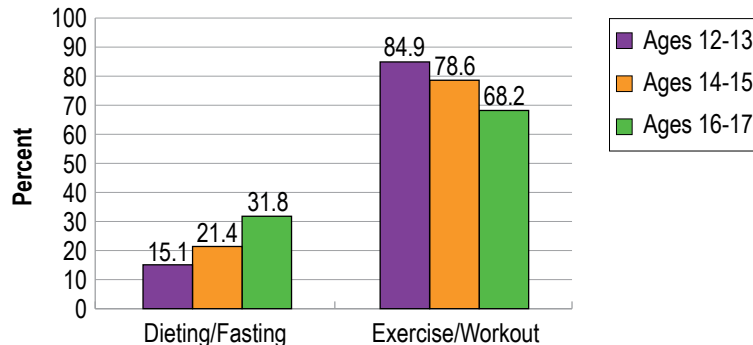
who reported only a difference of 0.2 pounds. The 2005 California Health Interview Survey (CHIS) found that 4.5 percent of female adolescents reported their self-perceptions about themselves as being very overweight compared to 2.6 percent of males, although no statistical analysis was performed.

<sup>1</sup> Neumark-Sztainer, D., Hannan, P., Story, M., and Perry, C., *Weight-control behaviors among adolescent girls and boys: Implications for dietary intake*, *Journal of the American Dietetic Association*, 104, 2004, 913-920.

<sup>2</sup> *Body Mass Index (BMI) was calculated using the equation: weight (kg) / height (m<sup>2</sup>). At risk for overweight = BMI > 85th < 95th percentile. Overweight = BMI > 95th percentile.*

### Female Adolescents' Most Common Weight Loss Method, By Age Group, California Teens, 2004

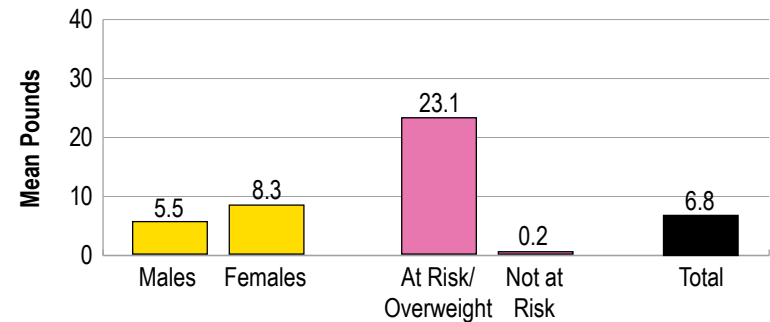
Source (V): California Teen Eating, Exercise and Nutrition Survey (CalTEENS)



NOTE: Body Mass Index (BMI) was calculated using the equation: weight (kg) / height (m<sup>2</sup>). At risk for overweight = BMI > 85th < 95th percentile. Overweight = BMI > 95th percentile.

### Difference Between Ideal Weight & Actual Weight, By Gender & At Risk/Overweight, California Teens, 2004

Source (V): California Teen Eating, Exercise and Nutrition Survey (CalTEENS)



## TOBACCO USE

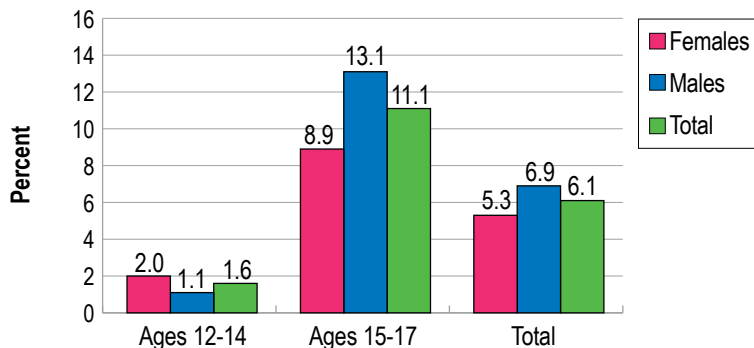
Cigarette smoking leads to immediate health problems such as respiratory and non-respiratory effects, addiction to nicotine, and risk for use of other drugs.<sup>1</sup> Long-term effects of smoking increase the risk of the lung, mouth, pharynx, esophagus, and bladder cancers as well as the risk of heart disease, stroke and chronic lung disease.<sup>1</sup>

The 2003 and 2005 combined data from the California Health Interview Survey indicate that 6.1 percent of California adolescents reported having smoked at least one cigarette in the previous month. Tobacco smoking rates differed by gender, with 5.3 percent of females and 6.9 percent of males reporting smoking cigarettes. Significant differences were observed for adolescents aged 12 to 14, whose smoking prevalence was 1.6 percent, compared with adolescents aged 15 to 17, whose smoking prevalence was 11.1 percent.

<sup>1</sup> Centers for Disease Control and Prevention (CDC), 2007. Available at <http://www.cdc.gov/HealthyYouth/tobacco/facts.htm>.

### Current Tobacco Smoker, By Gender & Age Group, 2003 & 2005

Source (III): California Health Interview Survey (AskCHIS)



## ALCOHOL USE

Nationwide heavy alcohol use is associated with approximately 75,000 deaths per year.<sup>1</sup> Alcohol has also been linked to injuries, physical fights, academic and occupational problems, and a wide range of chronic health-related physical and mental illnesses.<sup>1</sup>

Slightly more than a third of California Health Interview Survey adolescent respondents had an alcoholic drink in their lifetime, and rates were about equal for females (33.7 percent) and males (37.2 percent). Among the race/ethnicity groups, the highest rates of alcohol use were reported by Whites (40.0 percent) and lowest by Black/African Americans (26.0 percent).

About 7.0 percent of the adolescents engaged in binge drinking, which was defined in 2005 as having had five or more drinks on at least one occasion in the past month for males (7.3 percent) and having

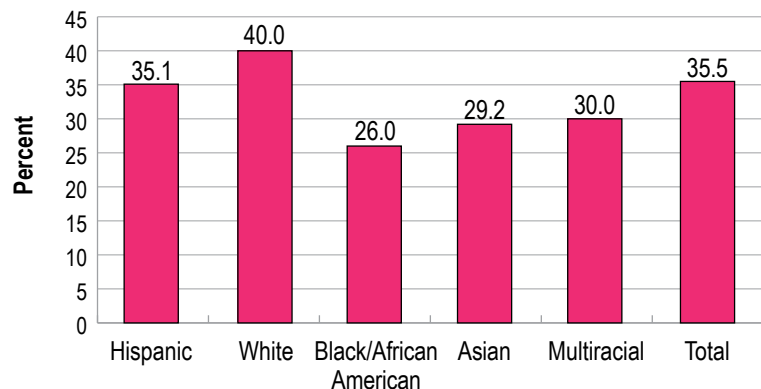


had four alcoholic drinks on at least one occasion in the past month for females (6.7 percent). White adolescents had the highest rates of binge drinking at 10.1 percent. According to CHIS, age made a difference: 1.2 percent of adolescents 12 to 14 years old reported binge drinking, while 13.1 percent of older adolescents 15 to 17 years old reported binge drinking.

<sup>1</sup> Centers for Disease Control and Prevention (CDC), 2007. Available at <http://www.cdc.gov/HealthyYouth/alcoholdrug/index.htm>.

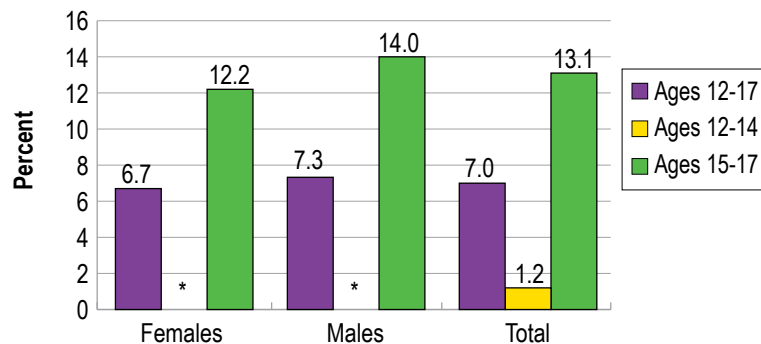
## Ever had an Alcoholic Drink, By Race/Ethnicity, 2005

Source (IV): California Health Interview Survey (CHIS)



## Alcohol Binge Drinking in the Previous Month, By Gender & Age Group, 2005

Source (IV): California Health Interview Survey (CHIS)



\*Sample size too small – data are unreliable

## ILLCIT DRUG USE

The use of alcohol and other drugs has been linked to severe emotional and behavioral problems, unintentional injuries, physical fights, academic and occupational problems, and illegal behavior.<sup>1</sup> The California Department of Alcohol and Drug Programs (ADP) reports that in 2006, 20,814 youth aged 12 to 17 entered treatment for alcohol and other drug abuse.<sup>2</sup> ADP also reports that in 2005, the primary drug used by youth was marijuana, followed by alcohol and methamphetamines.<sup>3</sup>

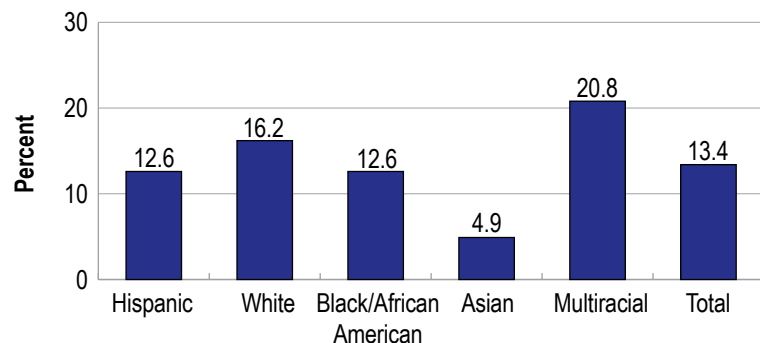
During 2003 and 2005, 13.4 percent of California Health Interview Survey (CHIS) adolescent respondents (12.2 percent of females and 14.6 percent of males) reported ever trying marijuana, cocaine, sniffing glue, or any other drugs. Among the race/ethnicity groups, Asians reported the lowest rates of drug use (4.9 percent), and the Multiracial group reported the highest rate of drug use (20.8

percent). When asked about marijuana, 8.2 percent (7.1 percent of females and 9.1 percent of males) said that they had used the drug in the past year. Among the race/ethnicity groups, Whites (11.1 percent) and the Multiracial group (14.6 percent) had the highest rates of marijuana use. Black/African Americans reported the lowest rates of marijuana use in the previous year (5.7 percent).

- 1 Centers for Disease Control and Prevention (CDC), 2007. Available at <http://www.cdc.gov/HealthyYouth/alcoholdrug/index.htm>; *The Relationship Between Mental Health and Substance Abuse Among Adolescents*, Rockville, Maryland: Substance Abuse and Mental Health Services Administration, 1999, p. 1.
- 2 California Department of Alcohol and Drug Programs (ADP), *California ADP Admissions Data, 2007*. Personal communication.
- 3 California Department of Alcohol and Drug Programs (ADP), 2007. Available at [http://www.adp.ca.gov/FactSheets/CA\\_Treatment\\_Admission.pdf](http://www.adp.ca.gov/FactSheets/CA_Treatment_Admission.pdf). p. 2.

## Ever Tried Drugs\*, By Race/Ethnicity, 2003 & 2005

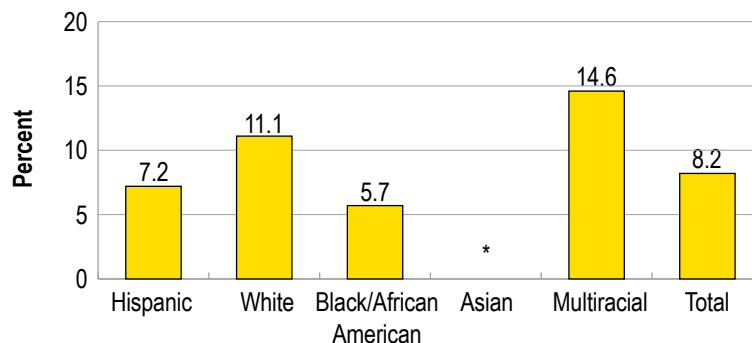
Source (III): California Health Interview Survey (AskCHIS)



\*Marijuana, cocaine, sniffing glue, other drugs

## Used Marijuana in the Past Year, By Race/Ethnicity, 2003 & 2005

Source (III): California Health Interview Survey (AskCHIS)



\*Sample size too small – data are unreliable



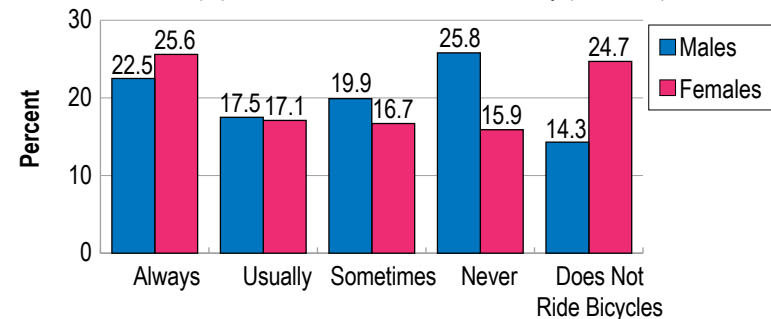
## HELMET USE WITH BICYCLES

Bicycling is used for recreational and transportation activities for children, yet about 300 children die and more than 400,000 are injured annually by bicycle-related activities.<sup>1</sup> A bicycle helmet is the single most effective safety device to reduce injury to the brain and face from bicycle crashes.<sup>2</sup>

During 2001 and 2003, more female California Health Interview Survey (CHIS) adolescent respondents

### Frequency of Wearing a Helmet While Riding a Bicycle, By Gender, 2001 & 2003

Source (III): California Health Interview Survey (AskCHIS)



NOTE: Each bar represents a percentage of the total population of that gender.

(24.7 percent) said they were not riding bicycles compared to males (14.3 percent). Whites reported the lowest rates of non-use of bicycles (15.2 percent) and Hispanics reported the highest rates of non-use of bicycles (22.6 percent).

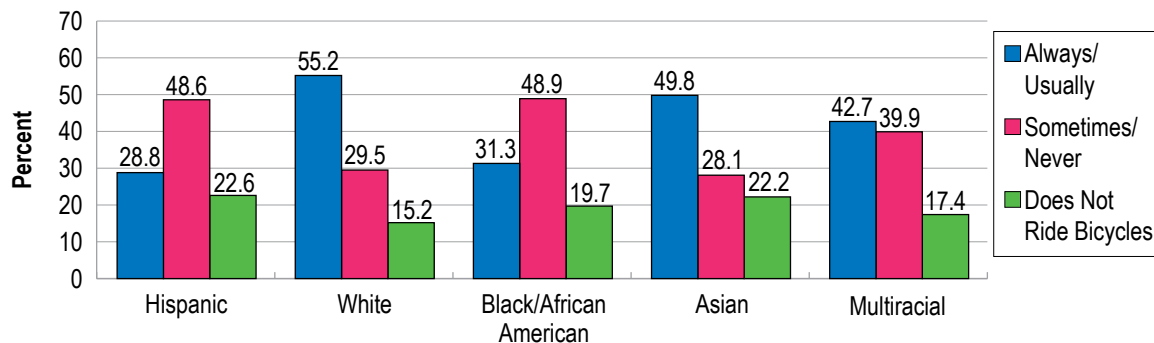
More males reported higher rates of never (25.8 percent) or sometimes (19.9 percent) wearing a helmet while riding bicycles, compared with females (15.9 percent and 16.7 percent, respectively). Among

the race/ethnicity groups, Hispanics (48.6 percent) and Black/African Americans (48.9 percent) reported the highest rates of never or sometimes wearing a helmet when riding bicycles, while Asians reported the lowest rates (28.1 percent).

- 1 Schieber, R.A. and Sacks, J.J., *Measuring Community Bicycle Helmet Use Among Children*, Public Health Reports, 116, 2001, 113-121. Available at <http://www.cdc.gov/ncipc/pub-res/helmet.pdf>.
- 2 Centers for Disease Control and Prevention (CDC), *Final FY 2003 GPRA Annual Performance Plan*, 2003, p. 160. Available at <http://www.cdc.gov/od/perfplan/2002/2002perf.pdf>.

## Frequency of Wearing a Helmet While Riding a Bicycle By Race/Ethnicity, 2001 & 2003

Source (III): California Health Interview Survey (AskCHIS)



NOTE: Each bar represents a percentage of the total population of that race/ethnicity.

## CAR SAFETY

Motor vehicle crashes are the leading cause of death for teens in the United States. In 2004, car crashes accounted for 33.9 percent of all deaths in the 12 to 17 age group.<sup>1</sup> During 2005, about 275,000 motor vehicle occupants aged 12 to 17 had non-fatal injuries that required treatment in an emergency department.<sup>1</sup> Speeding, non-use of seatbelts and alcohol use are some of the risk factors for teen car crashes.<sup>2</sup>

In 2003, 20.0 percent of California Health Interview Survey adolescent respondents reported that they rode in a car in which the driver had been drinking alcohol. Multiracial and Hispanic respondents indicated higher rates of riding in cars where the driver had been drinking alcohol (30.6 percent and 22.9 percent, respectively). Asian respondents reported the lowest rates of riding in a car with a

driver who had been drinking alcohol (9.0 percent), while Black/African Americans and Whites, reported higher rates (16.0 percent and 19.4 percent, respectively). Females reported riding in the car with someone who had been drinking (21.0 percent) slightly more than males (19.0 percent).

When asked about wearing seatbelts in the car, 5.4 percent of respondents indicated that they

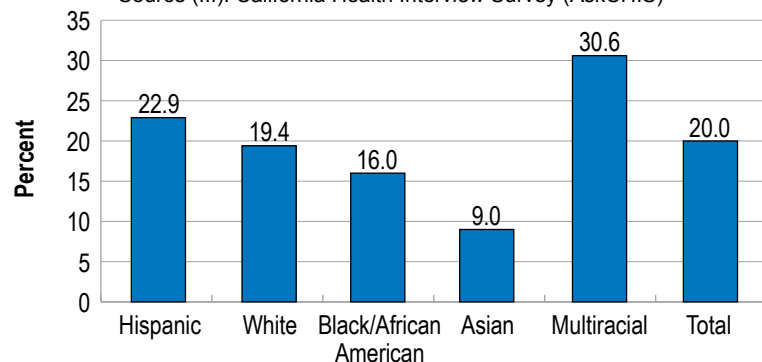
sometimes or never wore seatbelts in the car. A higher percentage of males (6.3 percent) than females (4.4 percent) reported that they sometimes or never wore seatbelts.

1 Centers for Disease Control and Prevention (CDC), 2007. Available at <http://www.cdc.gov/ncipc/wisqars/>.

2 Centers for Disease Control and Prevention (CDC), 2007. Available at <http://www.cdc.gov/ncipc/factsheets/teenmvh.htm>.

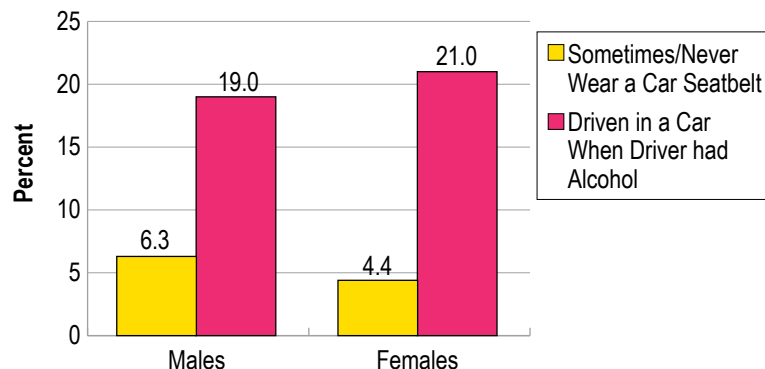
## Ever Ridden in a Car When Driver Had Alcohol, By Race/Ethnicity, 2003

Source (III): California Health Interview Survey (AskCHIS)



## Car Safety & Adolescents, By Gender, 2003

Source (III): California Health Interview Survey (AskCHIS)



## FLU VACCINATION

Influenza, commonly called “the flu,” is caused by the influenza virus, which infects the respiratory tract (nose, throat, and lungs). The flu may cause severe illness and life-threatening complications.<sup>1</sup> The Centers for Disease Control and Prevention (CDC) recommends that healthy children aged six months through their fifth birthday be vaccinated for the flu. Additionally, the CDC also recommends flu vaccination for any child up to 18 years of age with chronic health problems.<sup>2</sup>

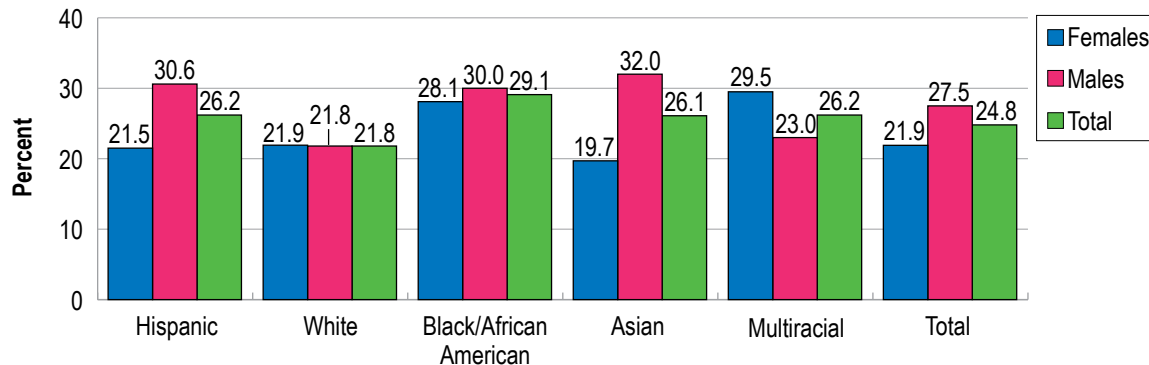
In 2005, 24.8 percent of California Health Interview Survey respondents aged 12 to 17 reported that they had a flu shot in the previous 12 months. Rates of flu shots varied by gender, with males reporting higher rates of flu shots (27.5 percent) compared with females (21.9 percent). Among the race/ethnicity groups, Hispanic males (30.6 percent), reported higher rates of flu shots than Hispanic females (21.5 percent).

1 Centers for Disease Control and Prevention (CDC), 2007. Available at <http://www.cdc.gov/flu/school/pdf/qa.pdf>.

2 Centers for Disease Control and Prevention (CDC), 2007. Available at <http://www.cdc.gov/flu/protect/children.htm>.

**Had a Flu Shot in the Previous 12 Months, By Gender & Race/Ethnicity, 2005**

Source (III): California Health Interview Survey (AskCHIS)



### USE OF SUNSCREEN

Children and adolescents have more opportunities and time than adults to be exposed to sunlight and ultraviolet (UV) light, and thus have more chances to develop skin cancer.<sup>1</sup> This underscores the need for protection from exposure during childhood and adolescence to reduce the risk of skin cancer in adulthood.<sup>2</sup> Although lightly pigmented individuals develop skin cancer at higher rates than darkly pigmented individuals, UV exposure increases everybody's risk for developing skin cancer.<sup>1</sup>

In 2001, California Health Interview Survey adolescent respondents were asked how often they used sunscreen of SPF 15 or greater when they went outside on a very sunny day for more than one hour. Responses varied by gender and race/ethnicity, with 32.6 percent of females and 54.5 percent of males stating that they never used sunscreen. Among the race/ethnicity groups, Hispanic (63.9 percent)

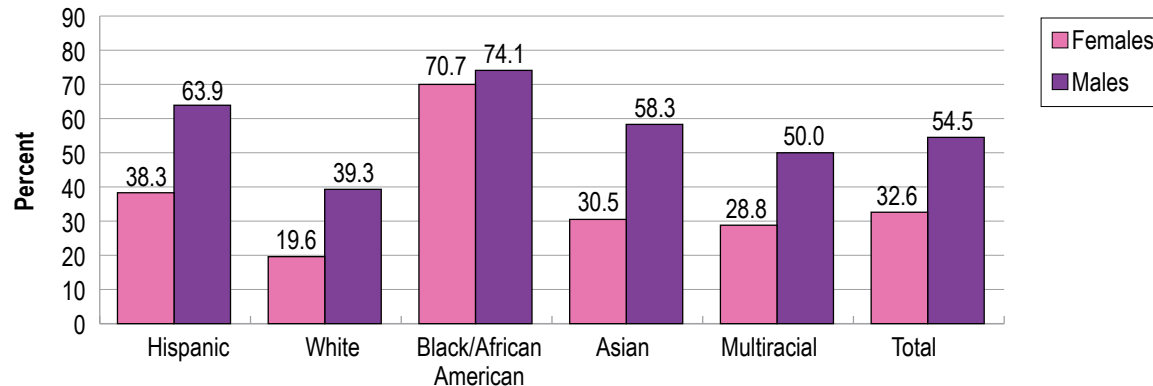
and Black/African American (74.1 percent) males and Black/African American females (70.7 percent) reported the lowest rates of using sunscreen.

1 Centers for Disease Control and Prevention (CDC), 2007. Available at <http://www.cdc.gov/HealthyYouth/skincancer/index.htm>.

2 Centers for Disease Control and Prevention (CDC), 2007. Available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5104a1.htm>.

### Never Used Sunscreen, By Gender & Race/Ethnicity, 2001

Source (III): California Health Interview Survey (AskCHIS)





## USE OF FIREARMS

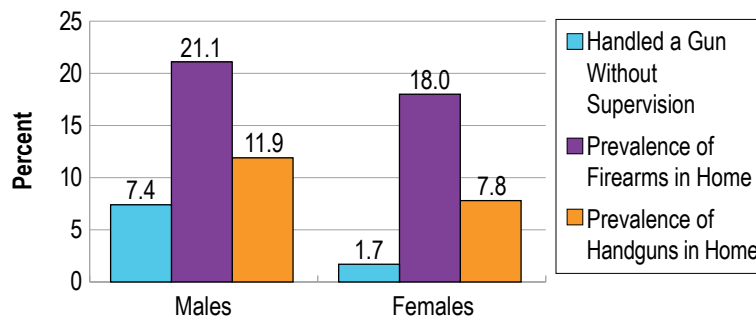
Youth violence is an important public health problem that results in deaths and injuries. In 2003, 5,570 youth aged 10 to 24 were murdered in the United States – an average of 15 each day. Of these victims, 82 percent were killed with firearms.<sup>1</sup>

In 2001, 19.6 percent of California Health Interview Survey adolescent respondents reported that there were firearms in their homes, and 3.0 percent reported having their own firearms.<sup>2</sup> Males (21.1 percent) or respondents from rural areas (32.8 percent) were more likely than females (18.0) or respondents from urban areas (17.5 percent) to report that there was a firearm in the home.<sup>2</sup> Males were also more likely to report owning a handgun (1.5 percent), compared with females (0.7 percent).<sup>2</sup> A higher proportion of males (7.4 percent) reported that they handled a gun without adult supervision or knowledge, compared with females (1.7 percent).<sup>3</sup>

- 1 Centers for Disease Control and Prevention (CDC), 2007. Available at <http://www.cdc.gov/ncipc/factsheets/yvfacts.htm>.
- 2 Sorenson, S.B. and Vittes, K.A., Adolescents and firearms: A California statewide survey, *American Journal of Public Health*, 94, 5, May 2004, 852-858.
- 3 California Health Interview Survey (AskCHIS), 2001.

### Prevalence of Firearms/Handguns, By Gender, 2001

Source (III): California Health Interview Survey (AskCHIS) and  
Reference no.2 (Sorenson SB, et al)



## YOUTH VIOLENCE

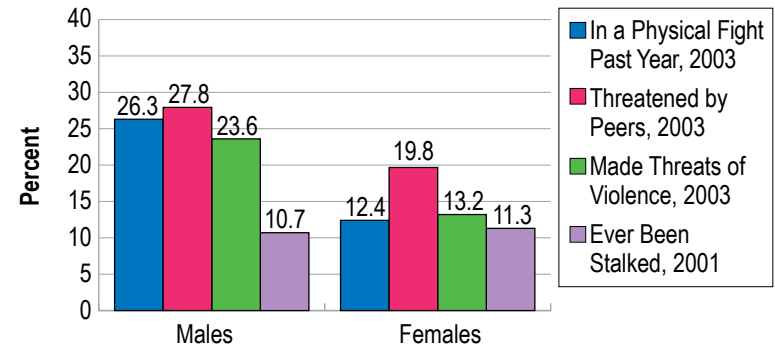
Youth violence is an important public health problem that results in deaths and injuries. In 2003, some 5,570 youth aged 10 to 24 were murdered in the United States, and in 2004, more than 750,000 youth in this country were treated in emergency departments for injuries due to violence.<sup>1</sup>

In 2003, 19.5 percent of California Health Interview Survey (CHIS) adolescent respondents reported being in a physical fight at least one or more times in the previous year. With the exception of stalking, the rates of violence differed by gender, with males reporting higher rates of physical fights (26.3 percent), being threatened by peers (27.8 percent), and making violent threats (23.6 percent), compared with females (12.4 percent, 19.8 percent and 13.2 percent, respectively).

Among the race/ethnicity groups, higher rates of physical fights were reported by Black/African Americans (27.4 percent) and Multiracial youth (27.4 percent), while lower rates were reported by Asians (5.9 percent). Also in 2003, 23.9 percent of respondents reported that they had been threatened by their peers, with lowest rates reported by Asians (9.8 percent). Lastly in 2003, 18.5 percent of respondents reported that they had made one or more threats of violence in the previous month. In

### Violence & Adolescents, By Gender, 2001 & 2003

Source (IV): California Health Interview Survey (CHIS)

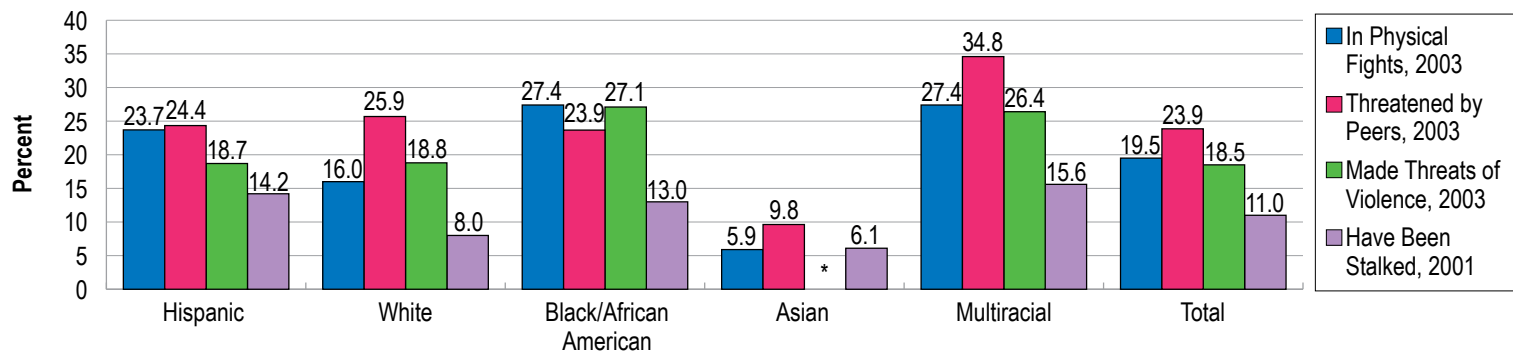


2001, about 11.0 percent of respondents reported that they had been stalked in the previous year. Among the race/ethnicity groups, Asians (6.1 percent) and Whites (8.0 percent) reported the lowest rates of stalking.

<sup>1</sup> Centers for Disease Control and Prevention (CDC), 2006. Available at <http://www.cdc.gov/ncipc/factsheets/yvfacts.htm>.

## Violence & Adolescents, By Race/Ethnicity, 2001 & 2003

Source (IV): California Health Interview Survey (CHIS)



\*Sample size too small – data are unreliable

## DATING ABUSE

Dating abuse is controlling, abusive and aggressive behavior in a romantic relationship. The abuse may be verbal, emotional, physical, or sexual.<sup>1</sup> Dating abuse has an impact on an individual's health throughout his or her life.<sup>1</sup> Dating abuse also has implications on other youth in locations such as schools.<sup>2</sup>

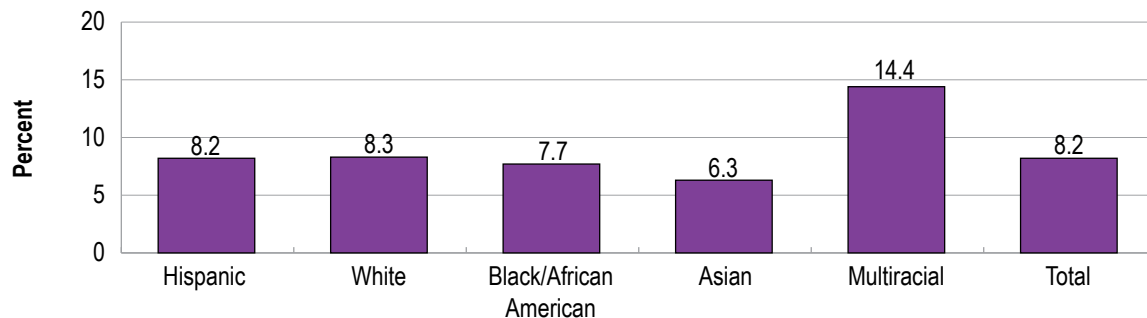
During 2003, 8.2 percent of California Health Interview Survey respondents aged 14 to 17 reported ever being slapped, kicked or physically hurt by their boyfriend/girlfriend (defined here as abuse). Of those who were ever abused, 56.6 percent reported that they were also abused in the previous 12 months. When respondents who were hurt by their boyfriend/girlfriend were asked whether they talked to someone about the abuse, 37.7 percent reported that they did. Among the race/ethnicity groups, the Multiracial group

reported the highest rate of abuse (14.4 percent), and the Asian group reported the lowest rate (6.3 percent).

- 1 Centers for Disease Control and Prevention (CDC), 2007. Available at <http://www.cdc.gov/ncipc/pub-res/DatingAbuseFactSheet.pdf>.
- 2 A Preventable Epidemic: Teen Dating Violence and Its Impact on School Safety and Academic Achievement, Sacramento, California: California Attorney General's Office and California Department of Education, October 2004, pp. 2-3. Available at <http://safestate.org/documents/teen%20dating%20violence.pdf>.

### Ever Been Physically Hurt, By Boyfriend/Girlfriend\*, By Race/Ethnicity, 2003

Source (IV): California Health Interview Survey (CHIS)



\*Asked of respondents aged 14 and above.

# SEXUAL ORIENTATION

Sexual orientation may have an impact on an individual's physical and mental health and on his or her success in school.<sup>1</sup> Sexual orientation refers to an individual's pattern of physical and emotional attraction toward others. Heterosexual individuals are attracted to people of the opposite gender, homosexual individuals are attracted to people of the same gender, and bisexual individuals are attracted to people of both genders.<sup>2</sup>

During 2005, 94.3 percent of male California Health Interview Survey (CHIS) adolescent respondents reported that they felt attracted to females, and 83.4 percent of female adolescent respondents reported that they were attracted to males. One in ten females (11.7 percent) and 4.0 percent of males reported that they were not attracted to any of the genders. Lower proportions (1.5 percent of males and 4.3 percent of females) reported that they were attracted to both genders.

- 1 American Psychological Association, 2007. Available at <http://www.apa.org/pi/lgb/publications/justthefacts.html#1>.
- 2 Frankowski, B.L. and the Committee on Adolescence, Sexual orientation and adolescents, *Pediatrics*, 113, 2004, 1827-1832. Available at <http://pediatrics.aappublications.org/cgi/reprint/113/6/1827>.

## Feeling Sexually Attracted to Males, Females, Both Genders, or Neither Gender, By Respondent Gender, 2005

Source (IV): California Health Interview Survey (CHIS)



\*Sample size is too small – data are unreliable  
NOTE: Each bar represents a percentage of the total responses for that gender.

## AGE AT FIRST MENSTRUAL PERIOD

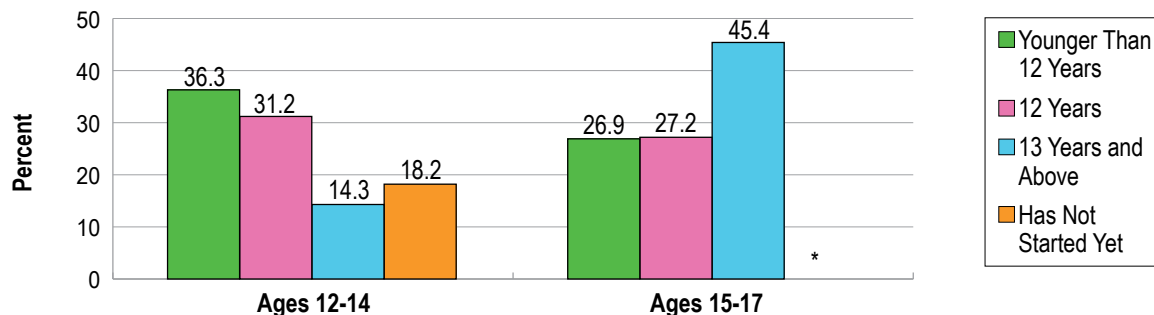
The age of girls at their first menstrual period is used to indicate different health aspects of a given population, including timing of sexual maturation and capacity to become pregnant, growth, nutritional status, and environmental conditions.<sup>1,2</sup> While the trend for age at first menstrual period in the United States overall in the past 30 years is unclear, observed changes indicate a slightly earlier age

for Black/African American and Hispanic females, compared to White females.<sup>1,2</sup>

Among the 2005 California Health Interview Survey respondents aged 12 to 14, 36.3 percent indicated age younger than 12 when their first menstrual cycle began, followed by 31.2 percent of respondents who were 12 when their first menstrual cycle began, followed by 14.3 percent for ages 13 and above. In the 12- to 14-year-old age group, 18.2 percent

### Age at First Menstrual Period, By Age Group, 2005

Source (IV): California Health Interview Survey (CHIS)



\*Sample size is too small – data are unreliable

NOTE: Each bar represents a percentage of the total data for that age group.

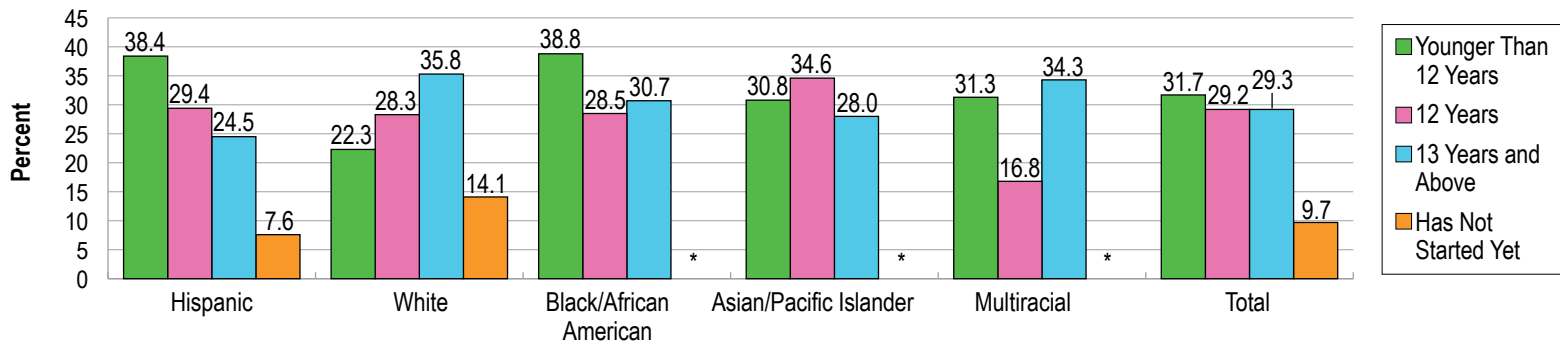


indicated that they had not started menstruation yet. Among the 15 to 17-year-old age group, most of the respondents reported that they had already started menstruation. Among the race/ethnicity groups, Black/African American females reported the highest percentage of first menstrual cycle at age younger than 12 (38.8 percent), followed by Hispanics (38.4 percent). White females reported the lowest rates of onset prior to age 12 (22.3 percent). White females reported the lowest rates of onset prior to age 12 (22.3 percent), consistent with U.S. data.

- 1 Chumlea, W.C., Schubert, C.M., Roche, A.F., Kulin, H.E., Lee, P.A., Himes, J.H., et al., Age at menarche and racial comparisons in U.S. girls, *Pediatrics*, 111, 2003, 110-113;
- 2 Fertility, Family Planning, and Reproductive Health of U.S. Women: Data From the 2002 National Survey of Family Growth, published in *Vital Health Statistics*, 23, No. 25, 2005, p. 14. Available at [http://www.cdc.gov/nchs/data/series/sr\\_23/sr23\\_025.pdf](http://www.cdc.gov/nchs/data/series/sr_23/sr23_025.pdf)

## Age at First Menstrual Period, By Race/Ethnicity, 2005

Source (IV): California Health Interview Survey (CHIS)



\*Sample size is too small – data are unreliable

NOTE: Each bar represents a percentage of the total data for that race/ethnicity.

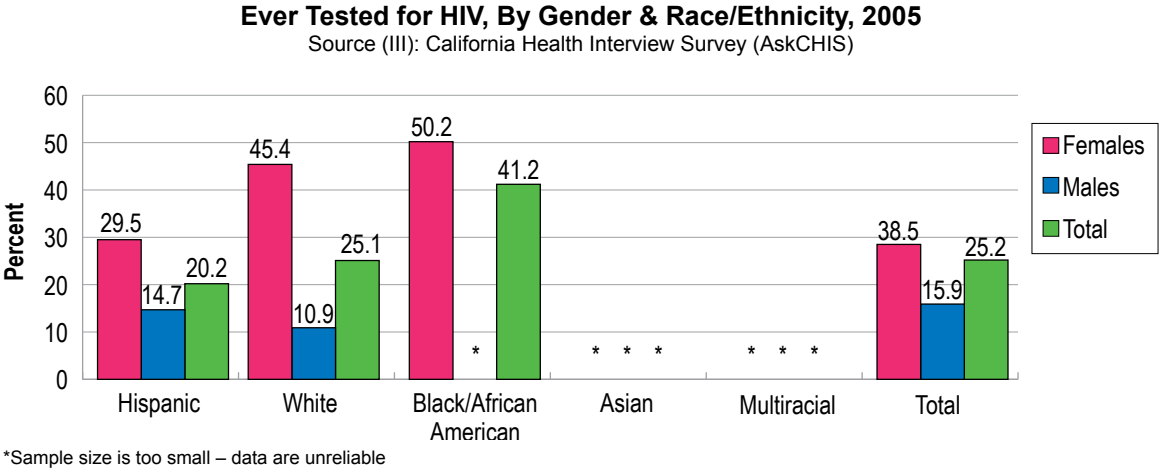
### HUMAN IMMUNODEFICIENCY VIRUS (HIV) TESTING

The human immunodeficiency virus (HIV) is the virus that causes acquired immunodeficiency syndrome (AIDS). In 2005 in the United States, the largest estimated proportion of HIV/AIDS transmission diagnoses were for men who have sex with men (MSM), followed by heterosexual contact and injection drug use.<sup>1</sup>

In 2005, 25.2 percent of California Health Interview Survey respondents aged 12 to 17 who had parent/guardian permission to answer questions about sex and who had sexual intercourse reported ever being tested for HIV. Black/African American adolescents reported the highest testing rate with 41.2 percent, and Hispanic adolescents reported the lowest testing rate with 20.2 percent. Among females, the overall HIV testing rate was 38.5 percent, with Hispanic females having the lowest testing rate at

29.5 percent. Among males, the overall HIV testing rate was 15.9 percent, with White males having the lowest rates at 10.9 percent.

1 Centers for Disease Control and Prevention (CDC), 2007. Available at <http://www.cdc.gov/hiv/resources/factsheets/At-A-Glance.htm>.



### TESTING FOR SEXUALLY TRANSMITTED DISEASES (STDs)

Sexually transmitted diseases (STDs) are the most commonly reported communicable diseases in California, yet many people are unaware of their risks and consequences.<sup>1</sup> While STDs affect all populations, some STDs affect women disproportionately. Women are more biologically susceptible to some STDs and may be more likely to have asymptomatic infections than men.<sup>1</sup>

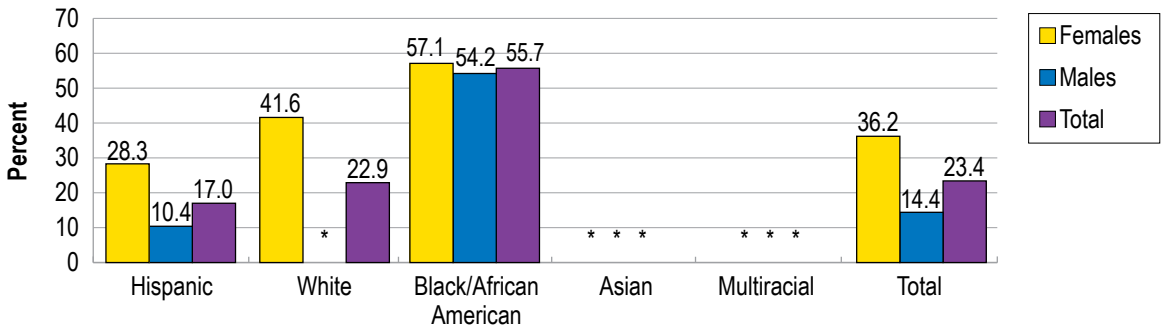
In 2005, 23.4 percent of California Health Interview Survey (CHIS) respondents aged 12 to 17 who had parent/guardian permission to answer questions about sex and who had ever had sexual intercourse reported being tested for STDs in the previous 12 months. Among the race/ethnicity groups, response rates varied, with Hispanics reporting the lowest testing rates (17.0) and Black/African Americans the highest rates of STD testing (55.7 percent). Females

reported higher rates of testing (36.2 percent) compared to males (14.4 percent).

1 Z. Weinbaum and T. Thorfinnson, eds., *Women's Health: Findings From the California Women's Health Survey, 1997-2003*, Sacramento, California: Office of Women's Health, California Department of Health Services, May 2006, Chapter 6, citing J. Chase, J.M. Chow, J. Lifshay, and G. Bolan, "STD/HIV Knowledge, Care-Related Behaviors, and Morbidity." Available at: [http://www.dhcs.ca.gov/dataandstats/reports/Documents/OWHReports/CWHS\\_97-03Report.pdf](http://www.dhcs.ca.gov/dataandstats/reports/Documents/OWHReports/CWHS_97-03Report.pdf).

## Tested for Sexually Transmitted Diseases (STDs) in the Previous 12 Months, By Gender & Race/Ethnicity, 2005

Source (III): California Health Interview Survey (AskCHIS)

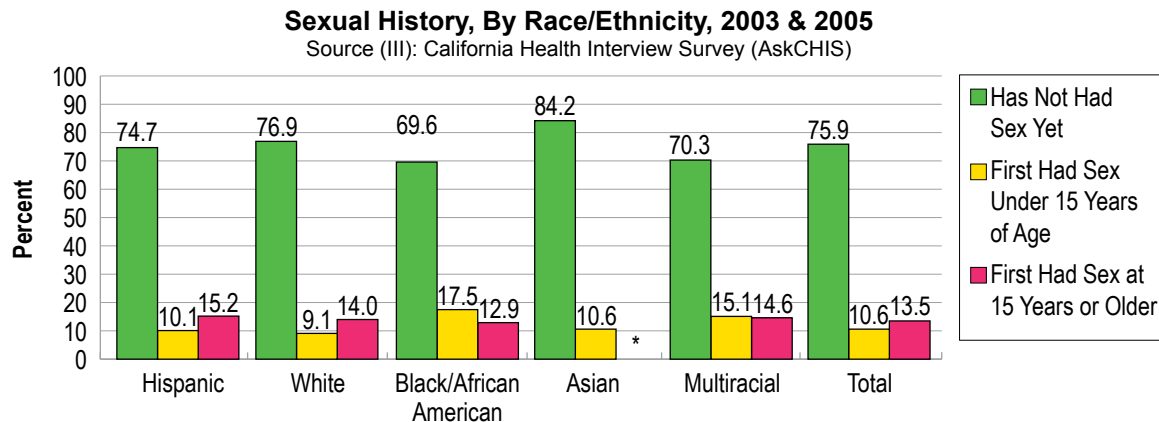


\*Sample size is too small – data are unreliable

## SEXUAL ACTIVITY

Monitoring levels of sexual activity is important for understanding risk factors for unintended pregnancy and sexually transmitted infections (STIs). Knowledge of the risks can help in developing appropriate intervention strategies for reducing STIs and unintended pregnancies.<sup>1</sup>

During 2003 and 2005, 75.9 percent of California Health Interview Survey adolescent (12-17) respondents reported that they never had sexual intercourse. Higher rates were reported for having first sexual intercourse at age 15 years or older (13.5 percent), compared with first having sexual intercourse at an age younger than 15 (10.6 percent). Among the different race/ethnicity groups, a higher rate of Asians (84.2 percent) reported never having sexual



\*Sample size is too small – data are unreliable

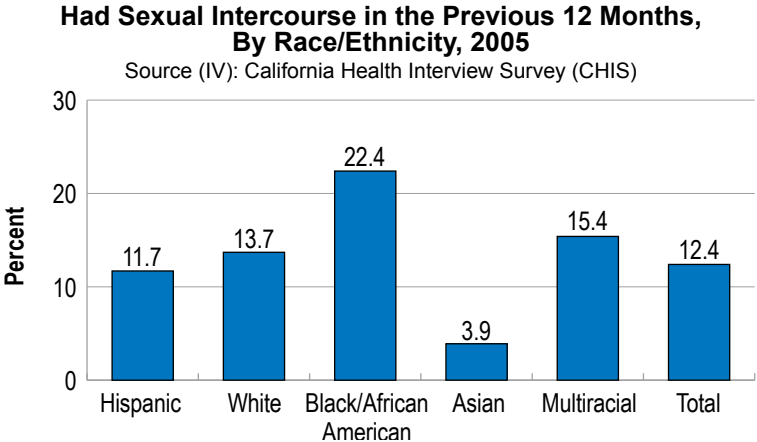
NOTE: Each bar represents a percentage of the total data for that race/ethnicity

intercourse. Rates varied slightly for gender, with 78.1 percent of females and 73.9 percent of males reporting that they never had sexual intercourse. Having first sexual intercourse before the age of 15 was reported by 13.0 percent of males and 8.2 percent of females.

During 2005, 12.4 percent of CHIS respondents reported having sexual intercourse within the

previous 12 months. Black/African Americans reported higher rates of sexual intercourse within the previous 12 months (22.4 percent), while Asians reported the lowest rates (3.9 percent).

1 Fertility, Family Planning, and Reproductive Health of U.S. Women: Data From the 2002 National Survey of Family Growth, published in *Vital Health Statistics*, 23, No. 25, 2005, p. 14. Available at [http://www.cdc.gov/nchs/data/series/sr\\_23/sr23\\_025.pdf](http://www.cdc.gov/nchs/data/series/sr_23/sr23_025.pdf).



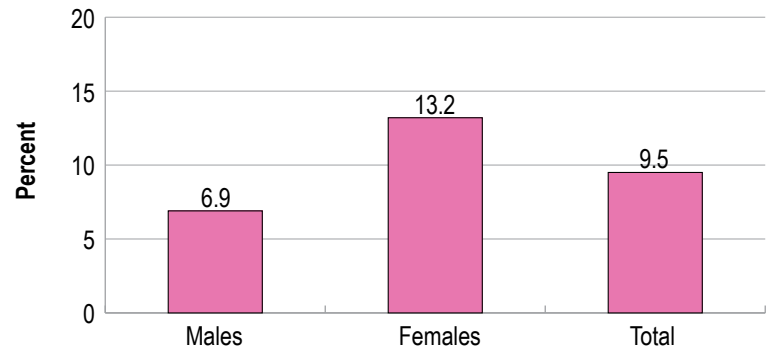


## CONDOM USE

On the national level, teen contraceptive use increased markedly between 1995 and 2002. Condom use is the most reported method of contraception both by males and females, even though the percentage of males reporting using condoms is higher than that of females.<sup>1</sup> In 2002 nearly 48 percent of 15-24 old males reported consistent use of condoms in the previous 4 weeks, compared with 31 percent of females.<sup>1</sup>

### Had Sexual Intercourse that Resulted in Pregnancy, By Gender, 2005

Source (IV): California Health Interview Survey (CHIS)



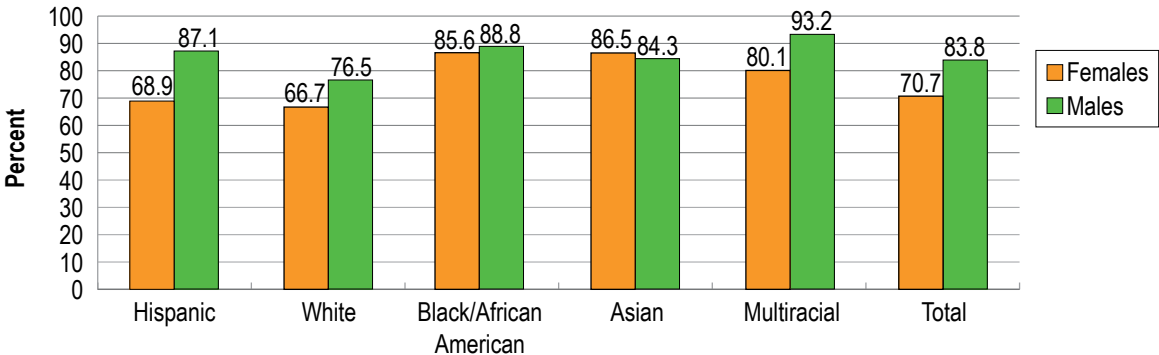
In 2005, 9.5 percent of California Health Interview Survey (CHIS) adolescent respondents (ages 12-17) who had permission to talk about sex and who had sexual intercourse reported that they had sexual intercourse that resulted in pregnancy. Rates varied by gender, with 13.2 percent of females and 6.9 percent of males reporting sexual intercourse that resulted in pregnancy. Most of the adolescents practiced safe sex; for their most recent intercourse, 78.1 percent of the 2003 and 2005 CHIS respondents

reported using condoms. Concerning gender, 70.7 percent of females and 83.8 percent males reported using condoms. Among the race/ethnicity groups, the lowest rates of condom use were reported by White males (76.5 percent), White females (66.7 percent), and Hispanic females (68.9 percent).

<sup>1</sup> *Teenagers in the United States: Sexual Activity, Contraceptive Use and Childbearing, 2002*, published in *Vital Health Statistics*, 23, No. 24, 2004, pages 2, 11. Available at [http://www.cdc.gov/nchs/data/series/sr\\_23/sr23\\_024.pdf](http://www.cdc.gov/nchs/data/series/sr_23/sr23_024.pdf)

**Used a Condom During Most Recent Sexual Intercourse, By Gender & Race/Ethnicity, 2003 & 2005**

Source (III): California Health Interview Survey (AskCHIS)





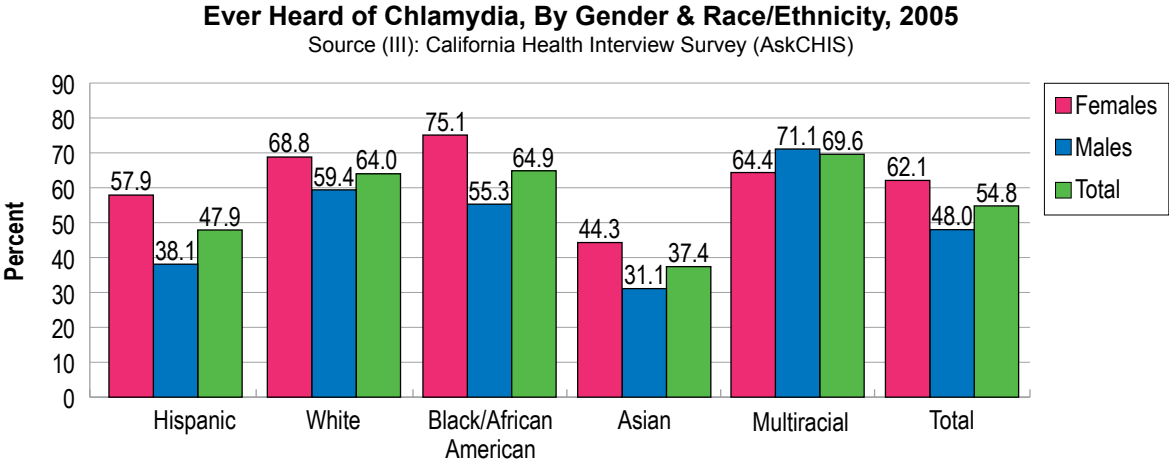
### KNOWLEDGE OF CHLAMYDIA

Chlamydia trachomatis is predominantly an asymptomatic sexually transmitted disease and the most commonly reported communicable disease in California.<sup>1</sup> The risk of untreated infection in women is associated with infertility and pelvic inflammatory disease.<sup>1</sup>

In 2005, 54.8 percent of California Health Interview Survey adolescent respondents who had parent/guardian permission to answer questions about sex and who had not had sexual intercourse (or who had had sexual intercourse, but were never tested for Chlamydia) reported that they had ever heard of the disease. Among the race/ethnicity groups, response rates varied, with Asians reporting the lowest rates of Chlamydia knowledge (37.4 percent) and Multiracial and Black/African American respondents reporting the highest Chlamydia knowledge rates (69.6 percent and 64.9 percent, respectively). Females reported

higher rates of Chlamydia knowledge (62.1 percent) compared to males (48.0 percent).

1 Z. Weinbaum and T. Thorfinnson, eds., *Women's Health: Findings From the California Women's Health Survey, 1997-2003*, Sacramento, California: Office of Women's Health, California Department of Health Services, May 2006, Chapter 6, citing J. Chase, J.M. Chow, J. Lifshay, and G. Bolan, "STD/HIV Knowledge, Care-Related Behaviors, and Morbidity." Available at: [http://www.dhcs.ca.gov/dataandstats/reports/Documents/OWHReports/CWHS\\_97-03Report.pdf](http://www.dhcs.ca.gov/dataandstats/reports/Documents/OWHReports/CWHS_97-03Report.pdf).



### KNOWLEDGE OF EMERGENCY CONTRACEPTION AND RU486

Emergency contraception (EC), or emergency birth control, is used to help keep a woman from getting pregnant after she has had unprotected sex (sex without using birth control). Emergency contraception is a drug that is designed to prevent pregnancy. In 2006, the U.S. Food and Drug Administration approved a change regarding over-the-counter (OTC) sales of emergency contraception.<sup>1</sup> In California, women aged 17 and over can buy EC in pharmacies without a doctor's prescription; women younger than 17 need a prescription to buy EC.<sup>2</sup>

In 2005, female adolescent respondents to the California Health Interview Survey who had parent/guardian permission to answer questions about sex were asked whether they had heard about emergency contraception. Less than half of the respondents had heard about EC (46.9 percent). Knowledge of EC

was highest for Whites (60.4 percent) and lowest for Asians (33.6 percent).

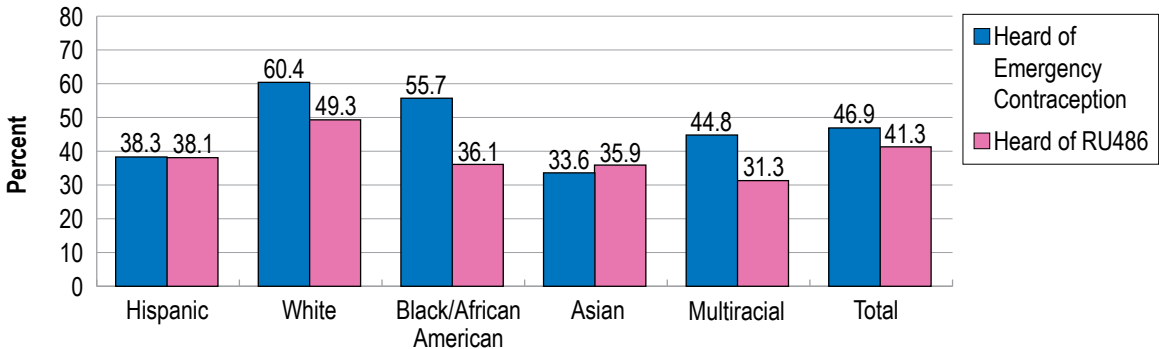
The same respondents were also asked whether they had heard about the drug RU486. RU486 is a drug which is taken under doctor's supervision to end a pregnancy. Fewer young women knew about RU486 than emergency contraception. Only 41.3 percent of

the young women had heard of RU486. Knowledge of RU486 was highest for Whites (49.3 percent) and lowest for the Multiracial group (31.3 percent).

- 1 U.S. Food and Drug Administration, 2007. Available at <http://www.fda.gov/bbs/topics/NEWS/2006/NEW01436.html>.
- 2 U.S. Food and Drug Administration, 2009. Available at <http://www.fda.gov/Drugs/DrugSafety/PostmarketDrugSafetyInformationforPatientsandProviders/UCM109775>.

Heard of Emergency Contraception (EC) & RU486, By Race/Ethnicity, 2005

Source (IV): California Health Interview Survey (CHIS)









## HEALTH SERVICES USE

### INTRODUCTION

The availability of quality health services directly affects the health and well-being of adolescents. For adolescents who have poor health status and live in poverty, access to a range of health services and insurance can be critical in preventing disease and improving quality of life. The following section presents data on adolescent health services use, including indicators concerning health insurance coverage, usual source of care, emergency room visits, confidential health care, physician visits, and delay in care.



## HEALTH INSURANCE COVERAGE

Lack of health insurance may have adverse effects on health status. Uninsured children and adults do not receive the care they need. They suffer from poorer health and development and are more likely to die earlier than insured individuals.<sup>1</sup> Health insurance includes both public and private payers who cover medical expenditures incurred by a defined population in a variety of settings.<sup>2</sup>

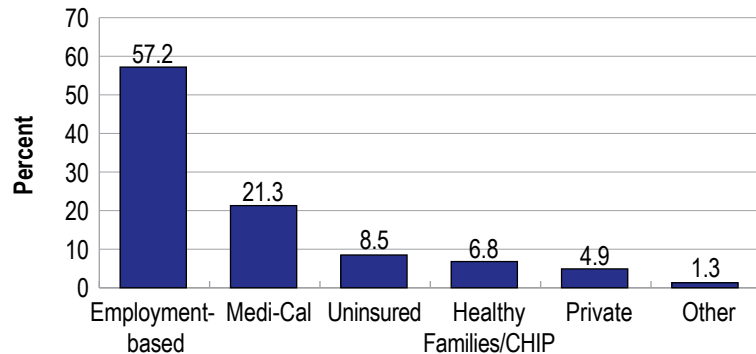
During 2003 and 2005, the highest rate of health insurance coverage among California Health Interview Survey adolescent respondents was employment-based (57.2 percent), followed by Medi-Cal (21.3 percent). Close to one in eleven adolescents (8.5 percent) were uninsured. Among the race/ethnicity groups, Hispanics had the highest rates of uninsurance (13.6 percent), and Whites had the lowest rates of uninsurance (3.3 percent). The range of doctor visits in the past year was between

0 and 25+ visits. Insured youth had higher rates of doctor visits in the previous year (83.2 percent), compared with uninsured youth (64.6 percent). Uninsured females had slightly lower doctor visits in the previous year (62.5 percent), compared with males (67.9 percent).

- 1 *Institute of Medicine of the National Academies, Insuring America's Health: Principles and Recommendations*, Washington, D.C.: The National Academies Press, 2004, p. 2. Available at [http://books.nap.edu/openbook.php?record\\_id=10874&page=1](http://books.nap.edu/openbook.php?record_id=10874&page=1)
- 2 *Centers for Disease Control and Prevention (CDC)*, 2007. Available at <http://www.cdc.gov/nchs/datawh/nchsdefs/healthinsurancecov.htm>.

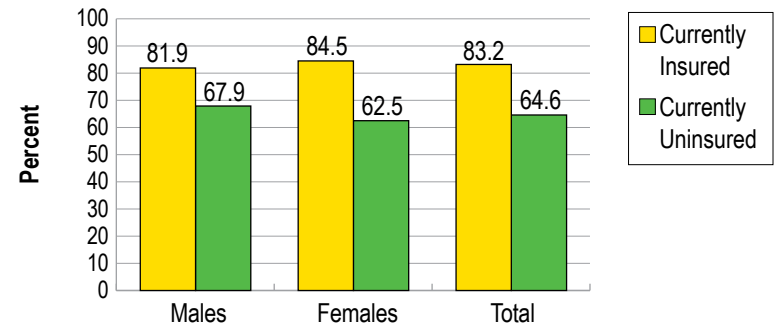
### Type of Current Health Insurance Coverage, 2003 & 2005

Source (III): California Health Interview Survey (AskCHIS)



### Had One or More Visits to the Doctor in the Past Year, By Health Insurance Status & Gender, 2003 & 2005

Source (III): California Health Interview Survey (AskCHIS)



### USUAL SOURCE OF CARE

Children and adolescents with a usual source of medical care are more likely to receive preventive health care services, including prescribed medicine.<sup>1,2</sup> Having a usual source of care also helps reduce preventable hospitalizations.<sup>3</sup>

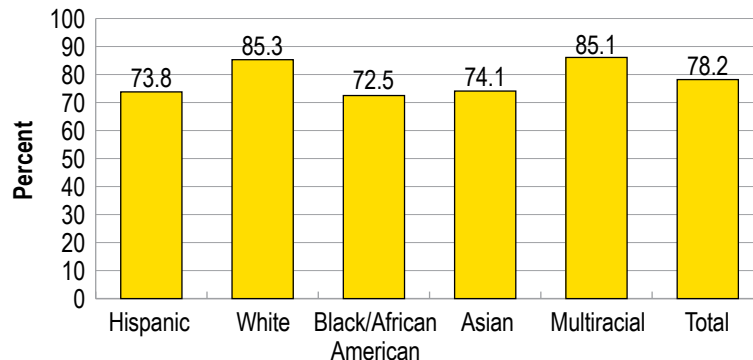
When asked about their medical care, 78.2 percent of California Health Interview Survey adolescent respondents said that they had a usual source of care. Usual source of care rates varied by race/ethnicity, with Whites having the highest rates (85.3 percent), followed by the Multiracial group (85.1 percent). Lower usual source of care rates were reported by Asians (74.1 percent), Hispanics (73.8 percent), and Black/African Americans (72.5 percent). The distribution of usual source of care was as follows: doctor's office (53.9 percent), community clinics or hospitals (21.3 percent), emergency room/urgent care (1.6 percent), and other (1.4 percent).

The rates of usual source of care differed for adolescents who had health insurance, compared with adolescents who were uninsured. Uninsured youth had significantly higher rates of lack of a usual source of care (34.1 percent) compared to insured youth (20.7 percent).

- 1 Simpson, G., Bloom, B., Cohen, R.A., and Parsons, P.E., *Access to health care. Part 1: Children, Vital and Health Statistics, Series 10* (No. 196), 1997, 7. Available at: [http://www.cdc.gov/nchs/data/series/sr\\_10/sr10\\_196.pdf](http://www.cdc.gov/nchs/data/series/sr_10/sr10_196.pdf).
- 2 Holette, L.K., Clark, S.J., Gebremariam, A., and Davis, M.M., *Usual Source of Care and Unmet Need Among Vulnerable Children: 1998-2006*, *Pediatrics* 2009; 123; e214-e219.
- 3 Kaiser Commission on Medicaid and the Uninsured, *Children's Health – Why Health Insurance Matters*, Washington, D.C.: Henry J. Kaiser Family Foundation, May 2002, pp. 1-2. Available at: <http://www.kff.org/uninsured/loader.cfm?url=/commonspot/security/getfile.cfm&PageID=14132>.

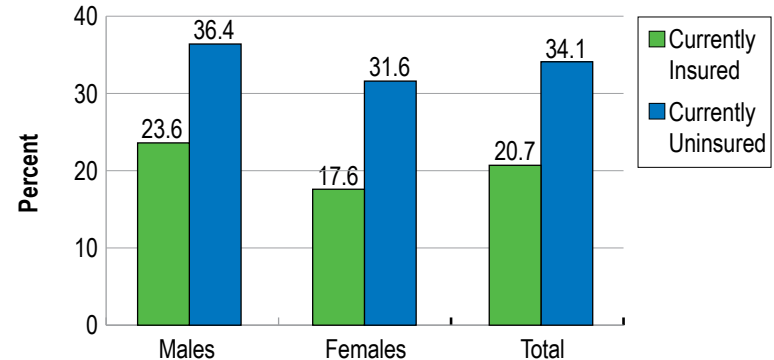
### Has a Usual Source of Health Care, By Race/Ethnicity, 2003 & 2005

Source (III): California Health Interview Survey (AskCHIS)



### Lacking Usual Source of Care, By Health Insurance Status & Gender, 2003 & 2005

Source (III): California Health Interview Survey (AskCHIS)







### EMERGENCY ROOM VISITS

The primary role of the Emergency Room (ER) is to provide treatment for the seriously ill and injured. While the number of ER visits in the United States increased to 113.9 million during the period from 1993 to 2003, the number of hospital ERs has decreased by about 12.3 percent, increasing the likelihood of overcrowding.<sup>1</sup>

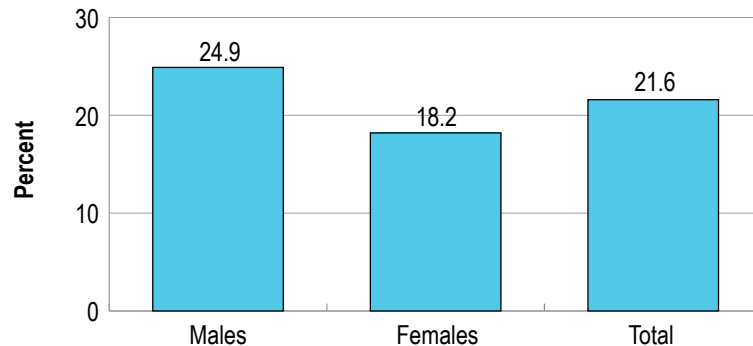
During 2005, according to California Health Interview Survey adolescent respondents, more males (24.9 percent) than females (18.2 percent) visited an ER. Slightly higher (not statistically significant) rates were observed for respondents with higher household incomes (22.6 percent, compared to 20.1 percent respondents with lower household incomes), respondents who had a usual source of care (22.3 percent, compared to 19.0 percent of those who did not have usual source of care), and those currently

insured (21.9 percent, compared with 17.2 percent of currently uninsured).

1 *National Hospital Ambulatory Medical Care Survey: 2003 Emergency Department Summary, Advance Data, No. 358, Washington, D.C.: National Center for Health Statistics, Centers for Disease Control (CDC), May 26, 2003, p. 2. Available at <http://www.cdc.gov/nchs/data/ad/ad358.pdf>.*

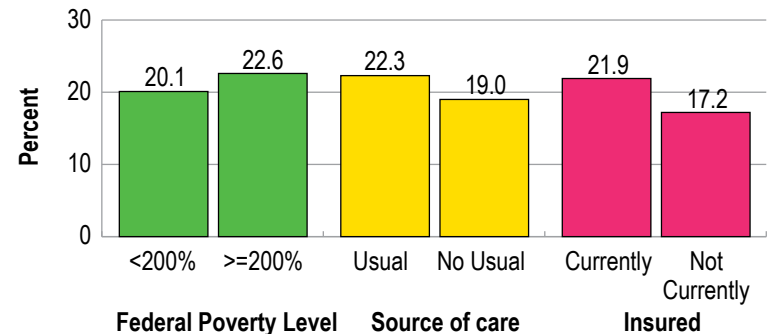
### Visited Emergency Room in the Past 12 Months, By Gender, 2005

Source (III): California Health Interview Survey (AskCHIS)



### Visited Emergency Room in the Past 12 Months, By Federal Poverty Level (FPL), Usual Source of Care, & Health Insurance Status, 2005

Source (III): California Health Interview Survey (AskCHIS)







### CONFIDENTIAL HEALTH CARE

Confidentiality in consultations with their doctors is very important to young people, but some are reluctant to ask their physicians for advice because of anxieties about confidentiality.<sup>1-2</sup>

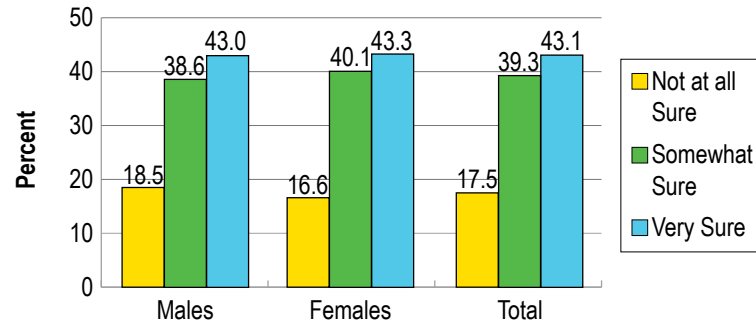
During 2003, California Health Interview Survey respondents aged 14 to 17 were asked how sure were they that they could contact their doctors if they had questions or concerns about their health or safety. Additionally, they were asked whether they knew about a place where they could go and see a doctor without their parents knowing about it. Slightly less than half of the respondents (43.1 percent) said that they were “very sure” that they could contact a doctor on their own, while 17.5 percent said that they were not at all sure about contacting a doctor on their own. About 38.3 percent of respondents said they knew a place where they could see a doctor without their parents knowing about it. By gender, rates were

higher for females (45.2 percent) compared to males (31.5 percent).

- 1 Carlisle, J., Shickle, D., Cork, M., and McDonagh, A., *Concerns over confidentiality may deter adolescents from consulting their doctors. A qualitative exploration*, *Journal of Medical Ethics*, 32, 2006, 133-137.
- 2 M.D. McKee, L.F. O'Sullivan and C.M. Weber, "Perspectives on confidential care for adolescent girls," *Annals of Family Medicine*, 4, 2006, 519-526.

### Confidence About Being Able to Contact a Doctor on Own\*, By Gender, 2003

Source (III): California Health Interview Survey (AskCHIS)

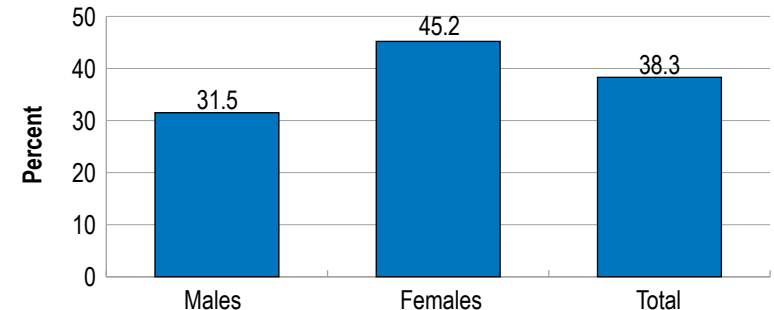


\*Asked of respondents age 14 and above.

NOTE: Each bar represents a percentage of the total population of that gender or group.

### Knowing a Place to See a Doctor Confidentially\*, By Gender, 2003

Source (III): California Health Interview Survey (AskCHIS)



\*Asked of respondents age 14 and above.

## PHYSICIAN VISITS

The American Medical Association (AMA) recommends that all adolescents have an annual preventive services visit,<sup>1</sup> and the American Academy of Pediatric Dentistry recommends a dental check-up at least twice a year for most children.<sup>2</sup>

When asked about physician visits, 82.0 percent of the 2005 California Health Interview Survey (CHIS) adolescent respondents said that they had visited a doctor in the previous year. The number of physician visits ranged between one and 25+ visits. Among the race/ethnicity groups, lower rates of physician visits were reported by Asians (71.8 percent), while higher rates were reported by Whites (87.4 percent).

Dental care visits in the previous year were reported by 86.1 percent of the 2003 CHIS adolescent respondents. The distribution of dental care visits in the previous year differed by race/ethnicity, with

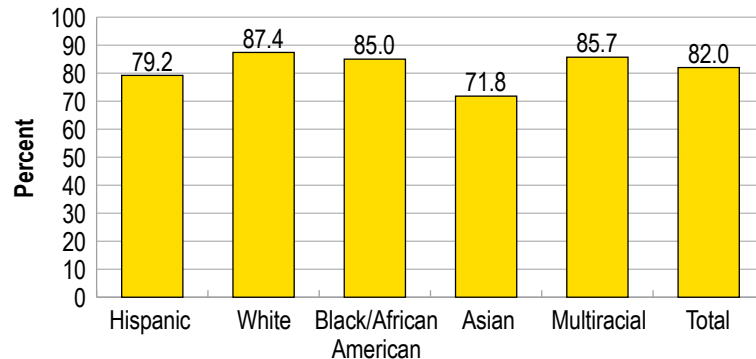


Whites reporting higher rates of dental visits (92.2 percent), and Hispanics reporting lower rates of dental visits (80.6 percent).

- 1 *Guidelines for Adolescent Preventive Services (GAPS)*, Chicago, Illinois: American Medical Association, 1997, p. 1. Available at <http://www.ama-assn.org/ama/upload/mm/39/gapsmono.pdf>.
- 2 *American Academy of Pediatric Dentistry*, 2007. Available at <http://www.aapd.org/publications/brochures/regdent.asp>.

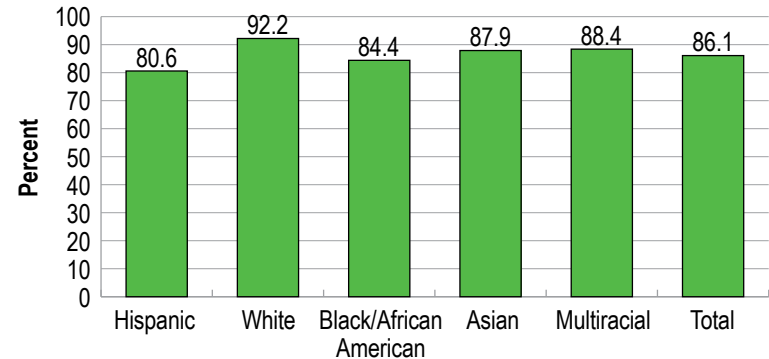
### Visited a Doctor in the Past Year, By Race/Ethnicity, 2005

Source (III): California Health Interview Survey (AskCHIS)



### Visited a Dentist in the Past Year, By Race/Ethnicity, 2003

Source (III): California Health Interview Survey (AskCHIS)





### DELAY IN MEDICAL CARE

Delay in obtaining medical care may have adverse effects on health status similar to those resulting from a lack of health insurance. Uninsured individuals who do not receive the care they need are likely to enter the health care system in poorer health or more advanced disease stage.<sup>1</sup> A number of factors such as cost, not being able to get appointments, or having to wait too long to see the doctor may be associated with delay of care.<sup>2</sup>

During 2005, 7.1 percent of California Health Interview Survey adolescent respondents reported that they delayed medical care in the previous year. A higher proportion of respondents without health insurance reported delay in getting medical care (9.1 percent), compared with insured respondents (6.9 percent). A slightly higher percentage of females (7.9 percent) reported delaying medical care than males (6.2 percent). Among the respondents who

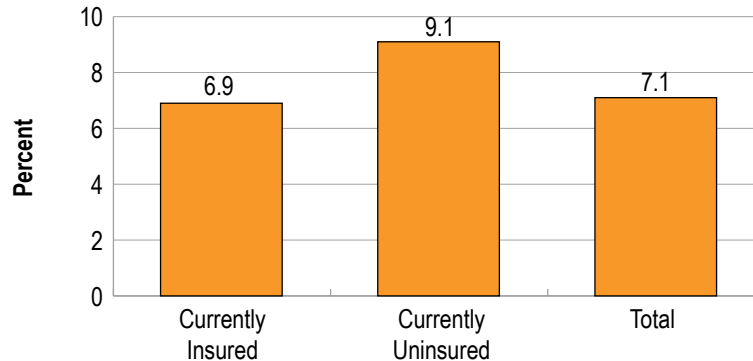


delayed medical care, cost was cited by 27.1 percent as a reason for the delay. The delay due to the cost differed for insured youth (23.5 percent), compared with uninsured youth (60.2 percent).

- 1 *Consequences of the Lack of Health Insurance on Health and Earnings*, Washington, D.C.: Urban Institute, 2006, p. 5. Available at [http://www.urban.org/UploadedPDF/1001001\\_CoverMo1.pdf](http://www.urban.org/UploadedPDF/1001001_CoverMo1.pdf).
- 2 *Racial and Ethnic Disparities in Adolescent Health and Access to Care*, Washington, D.C.: Incenter Strategies for the Advancement of Adolescent Health, January 2007, p. 3. Available at <http://www.incenterstrategies.org/jan07/factsheet1.pdf>.

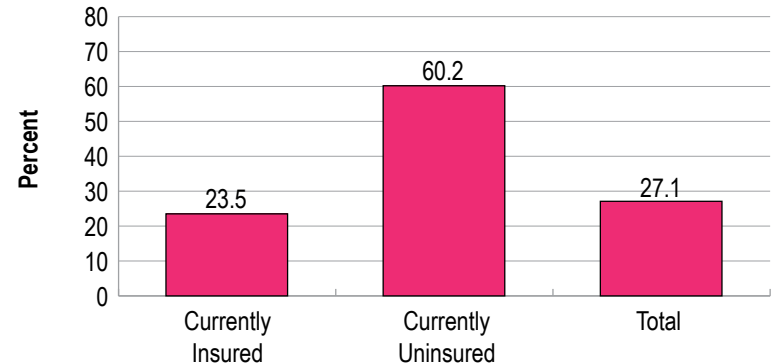
### Delayed or Did not Get Medical Care, By Health Insurance Status, 2005

Source (IV): California Health Interview Survey (CHIS)



### Cost as Reason to Delay or not Getting Medical Care, By Health Insurance Status, 2005

Source (IV): California Health Interview Survey (CHIS)



## METHODOLOGY

The majority of the data for California Adolescent Health 2009 were collected from three Computer Assisted Telephone Interview (CATI) surveys: (1) the California Health Interview Survey (CHIS); (2) the California Teen Eating, Exercise and Nutrition Survey (CalTEENS); and (3) the Survey of Adolescent Well-Being (SAWB). These surveys employed a similar methodology that allowed researchers to make generalizations about the adolescent population in California.

All three surveys were administered to youth aged 12 to 17, and ***unless otherwise specified, survey analyses presented here include responses of youth in this age group.*** Additional data in the report were collected from the California Department of Alcohol and Drug Programs and California Department of Education, State Vital Statistics, and California Department of Public Health. Descriptions

of the surveys that provided source material for the report are provided below.

### California Health Interview Survey (CHIS)

The *California Health Interview Survey* is the largest state health survey and one of the largest health surveys in the United States (U.S.). CHIS is a random-digit dial (RDD) telephone survey of households drawn from every county in California. CHIS was administered in 2001 and then again in 2003 and 2005. The survey collected information from approximately 50,000 households in 2001; 42,044 households in 2003; and 45,649 households in 2005. The CHIS sample is representative of the state's non-institutionalized population living in households. The adolescent sample size varied slightly each year. For example, 5,858 adolescents were interviewed in 2001; 4,010 in 2003; and 4,029 in 2005. The data are weighted by age, race/ethnicity



and gender to match the 2000 California census data.

CHIS interviews one sampled adult in each household. In households with children, CHIS interviews one adolescent between the ages of 12 and 17, and also obtains information for one child under age 12 by interviewing the adult who is most knowledgeable about the child. CHIS covers a wide range of topics, including health status, health conditions, health-related behaviors, health insurance coverage, access to and use of health care services, and the health and development of children and adolescents.

CHIS, which is based at the University of California, Los Angeles (UCLA) Center for Health Policy Research, is a collaborative project of the Center and the California Department of Public Health (CDPH), California Department of Health Care Services (DHCS), and Public Health Institute (PHI). Funding for the

survey comes from state and federal agencies and from several private foundations. Survey questions and topics may vary depending on the funders' interests. Much of the information for *California Adolescent Health 2009* was drawn from the public AskCHIS website at <http://www.chis.ucla.edu/main/default.asp>, indicated in the report as the California Health Interview Survey (AskCHIS). However, some information not available on the public website was analyzed from the original data sets, indicated in the report as the California Health Interview Survey (CHIS).

### California Teen Eating, Exercise and Nutrition Survey (CalTEENS)

The California Teen Eating, Exercise and Nutrition Survey, which was conducted for the first time in 1998, is administered biannually in even numbered years. Telephone interviews with 12- to 17-year-olds

in both English and Spanish are used to collect the CalTEENS data. Respondents are selected using a RDD procedure that provides a representative sample of the population. Approximately 1,200 teens throughout California complete the survey each year that it is administered. The data are weighted by age, race/ethnicity and gender to match the 2000 California census data.

CalTEENS queries key issues regarding teen eating behaviors and attitudes. Each respondent completes a modified 24-hour dietary recall to determine the prior day's consumption of servings of fruits and vegetables. Participants also respond to questions regarding consumption of whole grains, milk and dairy products, legumes, protein rich animal and soy foods, high-fat foods, soda, and sweets. Other survey items gather data on knowledge of current U.S. Department of Agriculture (USDA) dietary guidelines. The physical activity component of the survey covers daily participation in various forms of

physical activity and inactivity, which include meeting physical activity recommendations, participating in organized sports, using a computer, and watching television. Self-reported height and weight data are gathered to determine body mass index (BMI) and prevalence of being overweight.

CalTEENS also assesses the knowledge, motivation and self-efficacy related to eating healthy and being physically active as well as perceived barriers to these behaviors. In addition, various attitudinal factors associated with health behaviors, belief about foods needed for good health, dieting practices, and perceived ideal weight are examined. The survey also includes both school and home environment questions, including access at school to low nutrient foods and beverages, school breakfast and lunch, physical education, availability of fruits and vegetables in the home, working in a garden, and living in proximity to exercise facilities.

CalTEENS is a project of the California Department of Public Health (CDPH), Network for a Healthy California. The survey is administered by the Public Health Institute (PHI). Past funders have included the California Endowment and USDA. In 2004, the CalTEENS survey was funded by USDA Food Stamp Nutrition Education funds. The 2004 CalTEENS (n=1204) was drawn to be representative of the 2,890,133 teens in California aged 12 to 17 (2000 U.S. Census).

### Survey of Adolescent Well-Being (SAWB)

The *Survey of Adolescent Well-Being (SAWB)* consisted of a telephone interview and was administered in 2005 to adolescents between the ages of 12 and 17.<sup>1</sup> The 150 item questionnaire included mental health scales, a validated youth resilience-assets scale, multiple measures of socioeconomic status, and questions related to

smoking history and attitude. Questionnaires were completed with 532 adolescents as a follow-up study to the 2004 California Youth Tobacco Survey. Because the original adolescent sample for the California Youth Tobacco Survey was derived from randomly computer-generated telephone numbers, the SAWB sample is also considered to be random. The data are weighted by age, race/ethnicity and gender to match the 2000 California census data.

Using computer-assisted telephone interviewing software, interviewers read the questions as they appeared on the computer screen. Survey programming included several internal processes that helped automate data entry and increase the accuracy of data collection. Each respondent was called up to 15 times to obtain a completed interview. Calls that resulted in refusals from the adolescent were eliminated. Any refusals from the parent or guardian resulted in an immediate, final termination.

The overall response rate was approximately 61 percent, which might indicate that the findings are only generalizable to 61 percent of adolescents.

There is a certain amount of respondent bias inherent in any study; study participants are usually cooperative and wish to please the interviewer. Data from an anonymous and confidential telephone survey cannot be verified and may be imprecise, especially for more sensitive topics.

The cross-sectional design of this study has some inherent limitations. Foremost of these is the inability to determine causation between variables, occurrences and events. Additionally, while most of the survey scales, indices and questions were previously validated, the instrument as a whole was not tested for validity or reliability. The data collection for this study was funded by the California Department of Social Services (CDSS).

<sup>1</sup> Respondents were aged 12 to 17 during the screening for the survey, but two respondents turned 18 during the administration of the survey.

## GRAPH DATA SOURCES

All graph data sources are presented in this section, so that those interested will be able to access the data directly. Descriptions of the sources that provided data for the report graphs are provided below.

### Source (I): California Department of Finance

The Demographic Research Unit of the California Department of Finance is designated as the single official source of demographic data for state planning and budgeting. This Unit has information on State census data center products, reports and research papers, descriptions of services, data files, other data and resources, demographic searches, surveys, and price and population factors used for appropriation limits. Information for these graphs in this report was drawn from the Department of Finance website at <http://www.dof.ca.gov/html/DEMOGRAP/Data/RaceEthnic/Population-00-50/documents/2028.xls>.

### Source (II): California Department of Education

The core purpose of the California Department of Education is to lead and support the continuous improvement of student achievement, with a specific focus on closing achievement gaps. Information for these graphs was drawn from the public DataQuest website at <http://dq.cde.ca.gov/dataquest/>. This system has reports for accountability (e.g. API, AYP), test data, enrollment, graduates, dropouts, course enrollments, staffing, and data regarding English learners.

### Source (III): California Health Interview Survey (AskCHIS)

The *California Health Interview Survey (CHIS)* is the largest state health survey and one of the largest health surveys in the United States. CHIS is conducted by the UCLA Center for Health Policy Research in collaboration with the California Department of Public Health, the California Department of Health Care Services and the Public Health Institute. Much of the information for *California*

*Adolescent Health 2009* graphs was drawn from the public AskCHIS website at <http://www.chis.ucla.edu/main/default.asp>, indicated in the report as the California Health Interview Survey (AskCHIS). To obtain the data or further information about this survey interested parties may call (866) 275-2447 or email [chis@ucla.edu](mailto:chis@ucla.edu).

### **Source (IV): California Health Interview Survey (CHIS)**

Some CHIS information not available on the public website (AskCHIS) was analyzed from the original data sets, indicated in the report as the California Health Interview Survey (CHIS). To obtain the data or further information about this survey interested parties may call (866) 275-2447 or email [chis@ucla.edu](mailto:chis@ucla.edu).

### **Source (V): California Teen Eating, Exercise and Nutrition Survey (CalTEENS)**

The *California Teen Eating, Exercise and Nutrition Survey (CalTEENS)* is a project of the California Department of Public Health (CDPH), Network for a Healthy California. There are a large number of

data tables from the CalTEENS survey located on CDPH website at <http://www.cdph.ca.gov/programs/CPNS/Pages/CaliforniaStatewideSurveys.aspx>. To obtain the data or further information about this survey interested parties may contact Sharon Sugerman at: [Sharon.Sugerman@cdph.ca.gov](mailto:Sharon.Sugerman@cdph.ca.gov).

### **Source (VI): Survey of Adolescent Well-Being (SAWB)**

The *Survey of Adolescent Well-Being (SAWB)* consisted of a telephone interview and was administered in 2005 to adolescents between the ages of 12 and 17. The 150-question instrument included mental health scales, a validated youth resilience-assets scale, multiple measures of socioeconomic status, and questions related to smoking history and attitude. This survey is conducted by the California Department of Social Services and the Public Health Institute. To obtain the data or further information about this survey interested parties may contact the Survey Research Group at (916) 779-0338 or Marta Induni at [minduni@mathematica-mpr.com](mailto:minduni@mathematica-mpr.com).

## APPENDIX A

**Leading Causes of Death Among California Adolescents Aged 12 to 17, 2000-2004<sup>1</sup>**

Group Cause of Death	ICD-10 Codes	5 Year Avg.	
		N <sup>2</sup>	Rate <sup>3</sup>
Accidents (Unintentional Injuries)	V01-X59, Y85-Y86	348.6	11.0
Homicide	X85-Y09, Y87.1	165.4	5.2
Malignant Neoplasms (Cancer)	C00-C97	104.2	3.3
Suicide	X60-X84, Y87.0	80.0	2.5
Diseases of the Nervous System	G00-G99	50.8	1.6
Diseases of the Circulatory System	I00-I99	40.2	1.3
Congenital Malformations	Q00-Q99	36.4	1.1
Diseases of the Respiratory System	J00-J99	22.2	0.7
Endocrine and Metabolic Diseases	E00-E90	22.2	0.7
Symptoms, Signs, and Abnormal Conditions	R00-R99	15.0	*
All Other Causes of Death	Residual codes	34.0	1.1
<b>Statewide Total</b>	<b>A00-Y89</b>	<b>919.0</b>	<b>29.0</b>

<sup>2</sup> Annual average numbers of deaths for the 2000-2004 time period.

<sup>3</sup> Five-year average age-specific death rates per 100,000 population.

\*Rate statistically unreliable due to small number of events.

**Deaths & Death Rates Among Adolescents Aged 12 to 17, By Gender & Race/Ethnicity, 2000-2004<sup>1</sup>**

	5-Year Avg.		Lower	Upper
	N <sup>2</sup>	Rate <sup>3</sup>	95% C.I.	95% C.I.
<b>Statewide Total</b>	919.0	29.0	27.1	30.8
<b>Gender</b>				
Female	293.2	19.0	16.8	21.1
Male	625.8	38.5	35.5	41.5
<b>Race-Ethnicity</b>				
Black/African American	113.2	45.3	36.9	53.6
American Indian/Alaska Native	6.0	*	-----	-----
Asian	73.6	23.2	17.9	25.8
Hispanic/Latino	389.0	29.3	26.4	32.2
Pacific Islander	4.8	*	-----	-----
White	350.4	30.4	27.2	33.6
Multiracial	10.6	*	-----	-----

NOTES: Includes all causes of death, ICD-10 codes A00 - Y89.

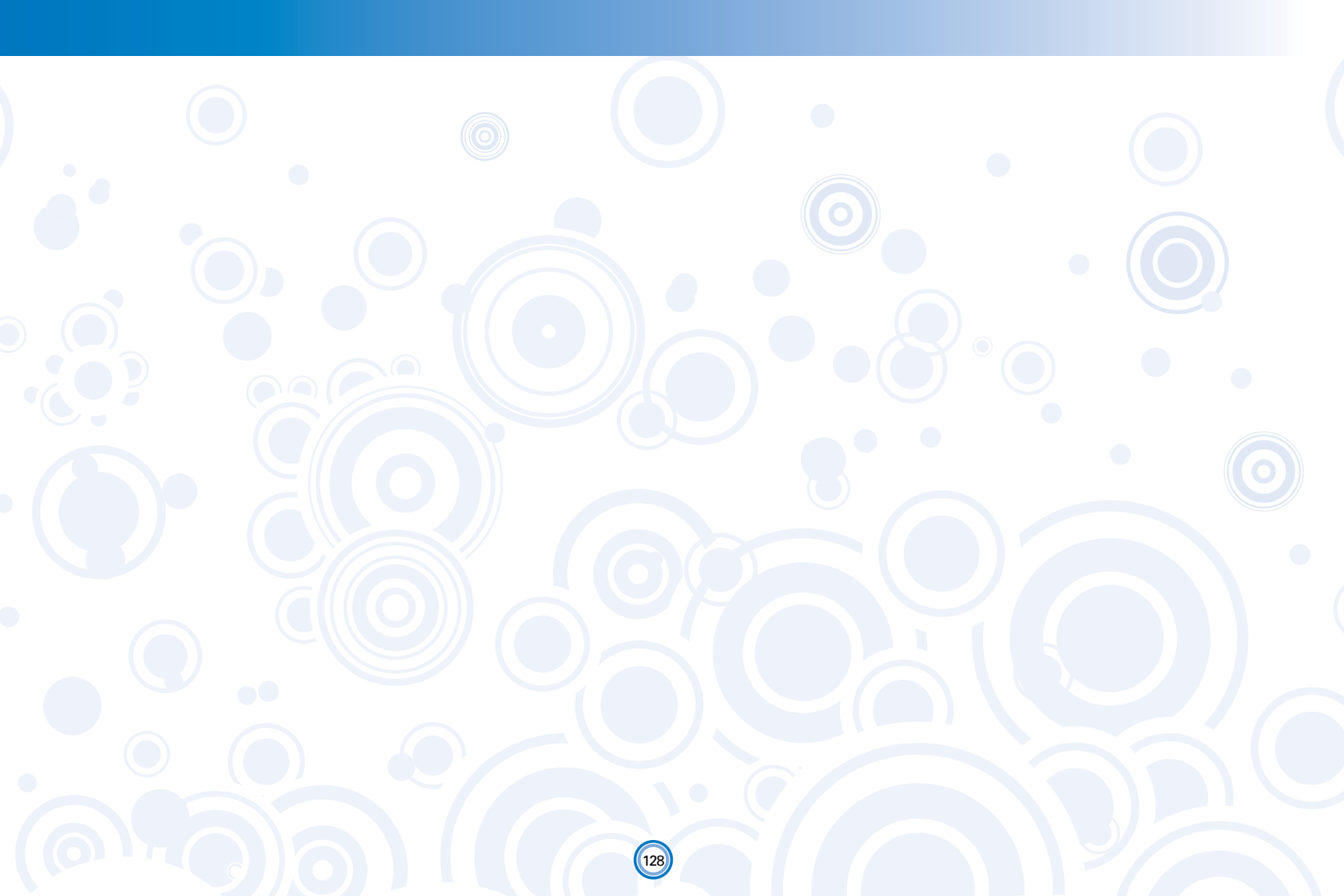
<sup>2</sup> Annual average rate per 100,000 population aged 12 - 17 years.

<sup>3</sup> Five-year average age-specific death rates per 100,000 population.

\* Rate statistically unreliable due to small number of events.

<sup>1</sup> Center for Health Statistics, California Department of Public Health, Death Records, 2000-2004; Demographic Research Unit, California Department of Finance, Race/Ethnic Population With Age and Sex Detail, 2000-2050, May 2004.







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